HIKE UP SQUARE BUTTE ★ SPOT A MOUNTAIN LION TRACK ★ WALK UNDER THE ROOSEVELT ARCH AT YNP ★
OBSERVE MOUNTAIN GOATS ★ SEE THE
RN LIGHTS ★ WATCH MULE DEER "STOT" ★ LEARN TO READ A TOPO MAP ★ VISIT A BUFFALO JUMP
BIKE THE HIAWATHA TRAIL ★ "PLAY" THE RINGING ROCKS ★ HUNT UPLAND BIRDS OVER A POINTING DOG ★
FISH NELSON RESERVOIR ★ VISIT FORT PECK DAM ★ PICK A QUART OF HUCKLEBERRIES ★ LEARN TO ROW A DRIFT BOAT ★ SNAG A PADDLEFISH ★
Montana Outdoors
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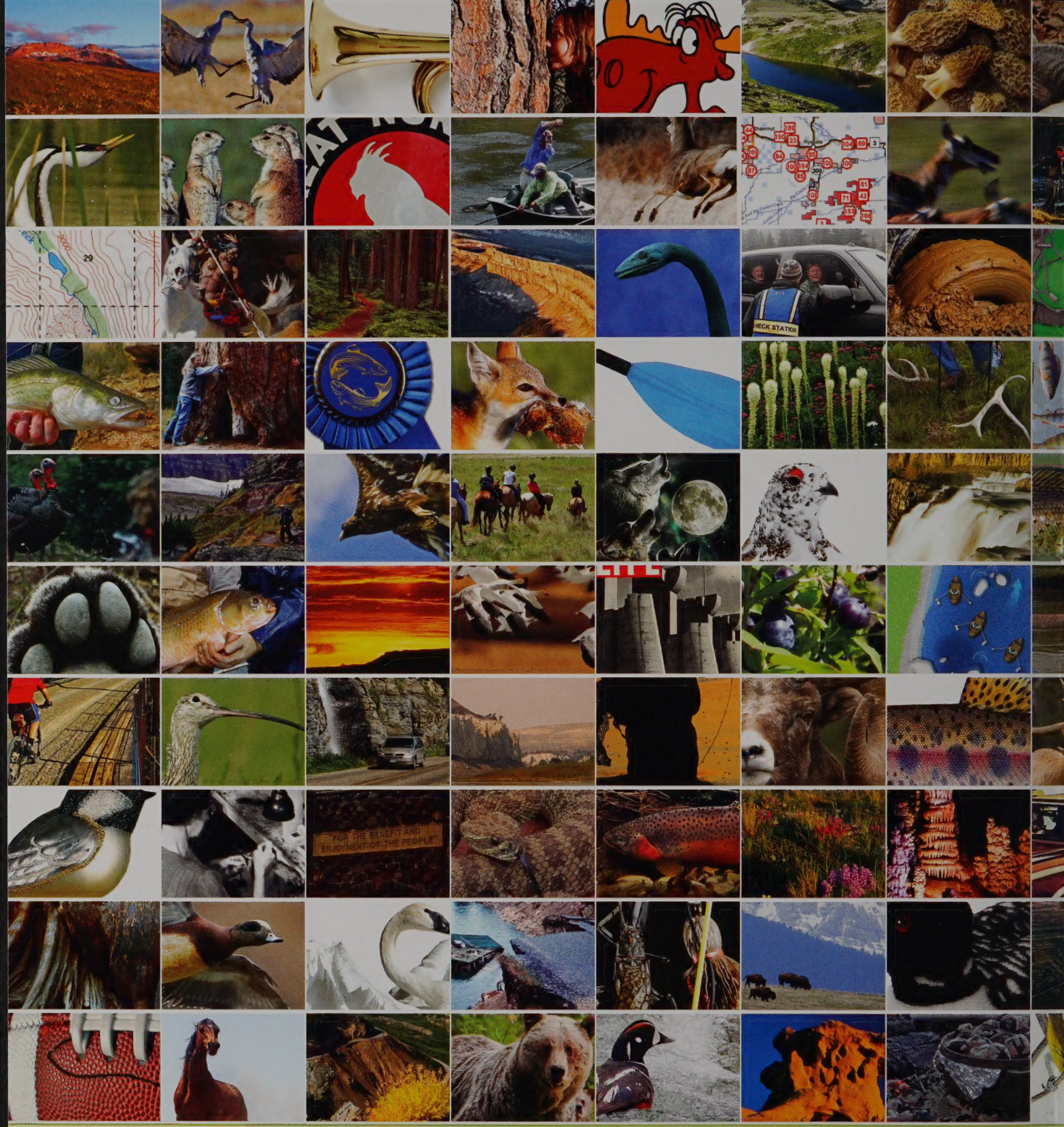
JULY–AUGUST 2013
A MONTANA OUTDOORS
BEST 100
SPECIAL ISSUE
What you need to see and do to fully experience Montana's outdoors

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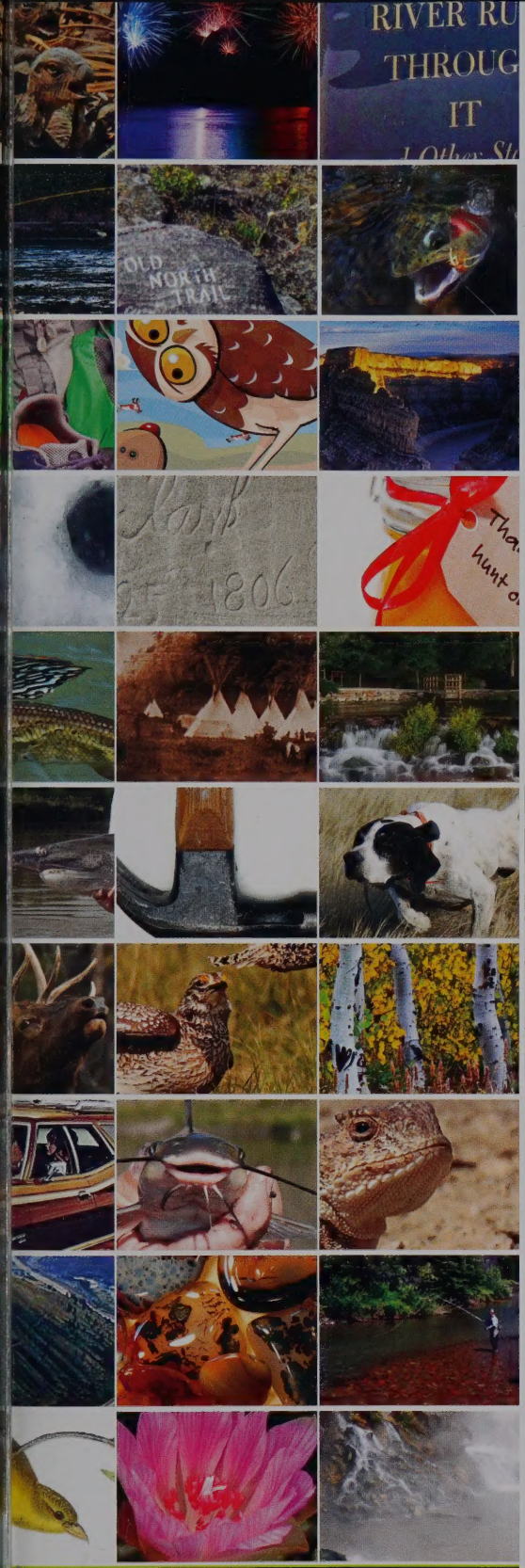



**FRONT COVER**
Hiking to an alpine lake, like Koessler Lake in the Bob Marshall Wilderness, is one of the things we recommend you do to fully experience Montana's outdoors. The complete list begins on page 2. Photo by Douglas Roane.



Montana Outdoors
JULY–AUGUST 2013

# Why a "Best 100"?

One problem with Montana—though you can hardly call it that, even if it is true—is that the state is so darned big and diverse. There's actually too much of it to take in. In a lifetime, a person couldn't hike all the hikes, hunt every game species, catch all the different coldwater and warmwater fish, spot the state's 468 bird species, and see all the geologic marvels and scenic wonders that adorn calendars and tourism brochures. Two lifetimes. Twenty lifetimes.

So a person—resident and visitor alike—can be left wondering exactly which of these many things he or she should see and do. What are the *essential experiences* that allow a person to say, Yes, I've seen and fully taken part in the best of what Montana's outdoors has to offer? Where would you even begin?

What are the *essential experiences* that allow a person to say, Yes, I've seen and fully taken part in the best of what Montana's outdoors has to offer?

That's where we come in. Over the past year *Montana Outdoors* asked naturalists, tourism experts, backcountry guides, outdoor writers, and other FWP staff members to select what they would consider Montana's essential out-of-doors sights and activities. We received hundreds of suggestions, then narrowed those down to what we're calling the "Best 100."

If you want, call it a bucket list. We prefer to think of it as a catalog of outdoor opportunities—things people can see and do to fully appreciate Montana's mountains, forests, prairies, rivers, lakes, and the fish and wildlife that live there.

We made sure to select as many sights and activities as possible that are open to people of all ages and abilities—across the state and throughout the seasons. Some, such as seeing the Chinese Wall or driving Going-to-the-Sun Road, are unique to Montana. Others, like tying a fly, picking huckleberries, or listening to sage-grouse "boom," are things you can experience elsewhere but are nevertheless intrinsic to our state's outdoors culture.

In keeping with FWP's mission, most of what's on the list has something to do with fisheries, wildlife, native plants, or natural landscapes.

For lack of space, we had to pass up many must-see sights or must-do activities. No doubt we failed to mention one of your favorites. If so, let us know. We hope to compile another "best" list down the road.

In the meantime, we hope this special issue of *Montana Outdoors* introduces you to places you never knew existed. Or reminds you of activities or places you once heard about but forgot. Or inspires you to try a completely new activity, maybe even something a bit out of your comfort zone.

As for whether this list truly represents Montana's "best" 100, well, who can say? All we know is that if someone wants to experience the highlights of our state's outdoors, this is not a bad place to start.

*—Tom Dickson, Editor*

## 1 Visit Sun River WMA

Montana's wildlife management area (WMA) system protects and makes publicly accessible some of the state's most important—and scenic—habitat communities. The jewel of this crown may be Sun River WMA, which every wildlife fan needs to visit at least once.

Sun River WMA sits along the foothills of the Rocky Mountain Front about 60 miles west of Great Falls. In 1947, with the help of local hunters, FWP bought the land from a willing landowner to manage as winter range to benefit the elk population. The purchase has also helped alleviate headaches for local ranchers, on whose property elk often graze when snow pushes them down from

the nearby mountains. Today the 20,000-acre wildlife area is home to roughly 2,000 wintering elk, as well as grizzly bears, wolves, pronghorn, mule deer, sharp-tailed grouse, ruffed grouse, and dozens of other bird and mammal species.

Where: From Augusta, follow the Gibson Reservoir/Sun Canyon Road 3.5 miles to a fork. Take the left fork (Augusta Willow Creek Road) 5 miles to the WMA entrance. Park there or carry on another 2.5 miles to the parking lot just past Swayze Lake.

When: Birding is best in spring. Though the WMA is closed December 1 to May 14, you can still see large concentrations of elk throughout the winter from the Augusta Willow Creek Road.

Bonus: If coming from the south, continue north on U.S. Highway 287/89 for spectacular views of the Rocky Mountain Front.

2

## See sandhill cranes perform their mating dance

These tall, elegant birds conduct a complex mating dance consisting of spread-wing hops, graceful pirouettes, and exaggerated bows. This is how they choose a mate, though exactly what either sex is looking for in the movements remains a mystery.

Where: Statewide in open grasslands, stubble fields, and marshes

When: Early April to mid-May

Bonus: Listen for the birds' loud croaking and rattling calls, part of the mating ritual and audible from up to a mile away.

3

## Hear an elk bugle

If you spend any time in the mountains during September, the bull elk's mating call is hard to miss—especially at dawn and dusk. The bull's high-pitched, resonant bugle is meant to attract females into his harem and warn off other males. The otherworldly sound often begins as a low bellow and rises to a high, screeching whistle, followed by a series of grunts. A common myth is that a bull bugles, or whistles, by blowing air across its eye teeth, or ivories. In fact, the sound emanates from the animal's throat.

Where: Primarily mountainous areas of western, central, and southwestern Montana. One sure-fire spot is the Slippery Ann Wildlife Viewing Area in the CMR National Wildlife Refuge. The area is just off U.S. Highway 191 between Lewistown and Malta. During the rut, several hundred elk congregate in the viewing area (off-limits to hunting) and are visible from the road.

When: Late August through late October, though prime time is mid-September. Most bugling occurs at dawn and dusk, though some days bull elk bugle at all hours.

Bonus: Get a bull to bugle using a commercial bugle or cow elk call. Just hearing an elk respond to your call is a rush, but sometimes you can lure him close enough to see the whites of his eyes. Whether you are hunting or not, you'll never forget the sight of an 800-pound bull elk approaching your position with the intention to do battle—or mate.

## 4 Smell a ponderosa pine

Even from afar, it's easy to admire these grand conifers, designated as Montana's state tree in 1949. The elegant evergreens are beautifully proportioned, with broad branches and orangish puzzle-piece bark. But to really know a ponderosa pine you need to get intimate with one. On a sunny day, put your nose up close and breathe in the vanilla smell created as sunshine heats the bark. Then pinch a few fresh needles between your fingers and take in the fresh scent of citrus and turpentine released from the oils. It may have been this delicious forest fragrance that inspired the first tree hugger.

**Where:** Throughout western, northwestern, and southeastern Montana in mountains and foothills

**When:** Smell the vanilla of a ponderosa pine any time of year when the sun is shining.

**Bonus:** On a sunny summer day, bring a blanket and a picnic basket. After eating, lie down in a shady bed of needles and let yourself be lulled to sleep by the whisper of wind in the boughs above.

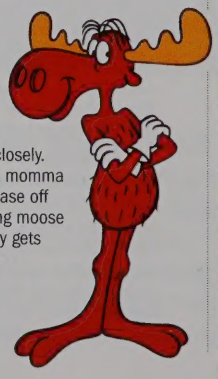
## 5 See a moose

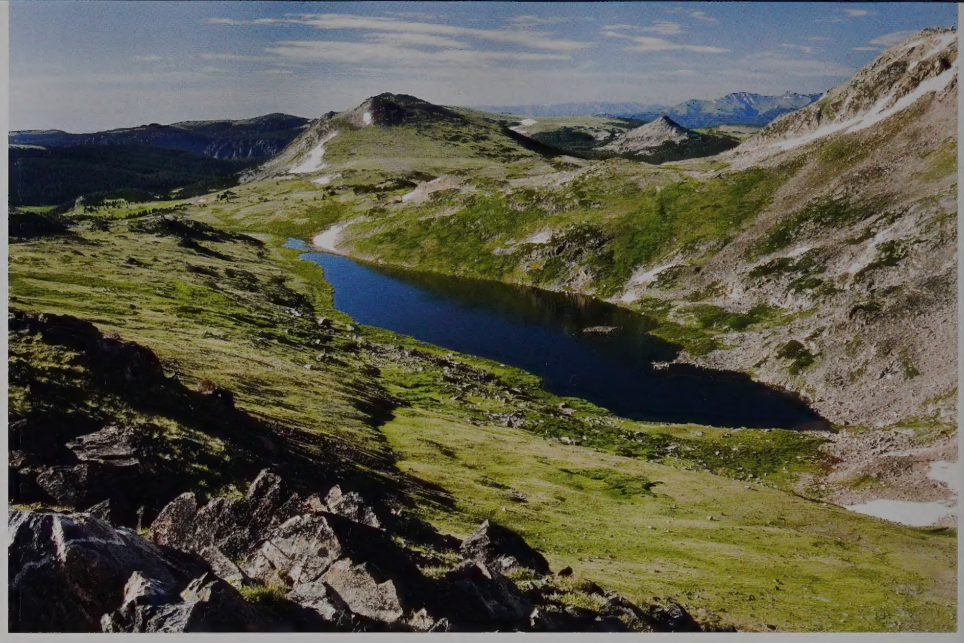
Standing 6 feet tall at the shoulder and weighing 700 to 800 pounds, moose are big. But just try to see one. The oversized ungulates often hide in brushy, wooded areas, where their dark coats blend into the shadows. During summer, look closely for moose in mountain meadows, swampy areas, forest clear-cuts, and burns. In winter, find them in willow flats and dense conifer forests.

**Where:** Montana's moose hotspots include the Big Hole Valley, Bob Marshall Wilderness, the Flathead, Deerlodge, and Gallatin National Forests, and Glacier National Park. Probably the easiest way to see one of these charismatic creatures is to hike any of the trails surrounding lakes in the Swiftcurrent area of Glacier National Park.

**When:** Year-round

**Bonus:** Moose usually are not aggressive unless approached too closely. The exception is cows with calves. A momma moose might travel 100 yards to chase off a would-be threat. Often an attacking moose will make a short rush, which usually gets the point across, but occasionally it all-out attacks, striking with its powerful hooves.





## 6 Hike to an alpine lake

This classic Montana midsummer outing requires no special skills or equipment. And the payoff is tremendous—a riot of wildflowers, wildlife in all directions, and the feeling you've discovered a secret mountain paradise. High-altitude alpine lakes sit above the tree line, where woody vegetation rarely grows due to the cold, dry environment. The lakes are clear because low temperatures suppress algae growth. FWP stocks many of these waters, so don't be surprised to see trout cruising the shallows, especially at dawn and dusk.

Some of the easier hikes to alpine lakes are off the Beartooth All-American Road (Beartooth Highway) between Red Lodge and Cooke City. Glacier National Park is home to several scenic alpine lakes that don't require a strenuous hike. Also, look for accessible alpine lakes in any Montana mountain hiking guide.

**Where:** Throughout western Montana

**When:** The best time for hiking without snow on the ground is August.

**What:** Even in the heat of summer, pack a raincoat for unforeseen storms, and carry bear pepper spray when in grizzly country.

**Bonus:** Buy a license, bring a fishing rod, and catch some trout. Build a fire or use a camp stove to cook some of your catch.

## 7 Pick a quart of morel mushrooms

We've written about morelling several times in past issues, so all you need to know is available on the *Montana Outdoors* website (fwp.mt.gov/mtoutdoors). Read up, find yourself a burn site, and get picking.

**Where:** Generally west of the Continental Divide in areas where forest fires burned the previous year. If conditions are dry, look for seeps and other wet spots.

**When:** May, June, and July

**How:** A few inedible mushrooms resemble morels, so it's best to go with an experienced picker your first time to learn exactly what the safe ones look like.

**Bonus:** Consider joining the Western Montana Mycological Association, based in Missoula, or similar organizations. Accompanying these mushroom hunters on their annual outings is the best way to learn about morels and other edible fungi in Montana.

## 8 View Egg Mountain

Montana is packed with significant dinosaur digs, such as those at Glendive, Malta, Jordan, and the shoreline of Fort Peck Reservoir. But Egg Mountain, along the Rocky Mountain Front just west of Choteau, is particularly noteworthy. In 1977 fossils of small dinosaur bones, eggs, and embryos were found here by local rock-shop owner Marion Brandvold. The following year, paleontologist Jack Horner and a research partner determined that the new species, which they named *Maiasaura* ("good mother lizard"), raised its young in colonies, as many birds do. This was the first indisputable evidence that dinosaurs were capable of complex behavior, and it rocked the world of paleontology.

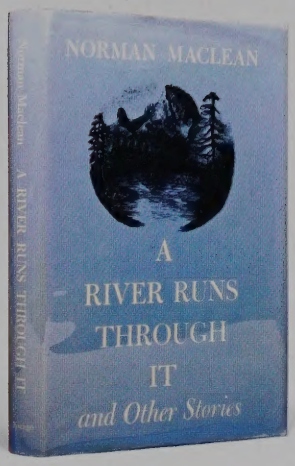
Horner later became curator of paleontology at Montana State University's Museum of the Rockies and is today considered one of the world's foremost authorities on dinosaur social structure and DNA. The Montana Legislature designated the *Maiasaura peeblesorum* as Montana's state fossil in 1985.

The site where *Maiasaura* fossils were found was named Egg Mountain and has since yielded the largest cache of dinosaur eggs, embryos, and baby skeletons ever found in the Western Hemisphere. The site, entirely on private land, is also home to one of the world's largest known concentrations of adult dinosaur skeletons. Paleontologists have interpreted this accumulation as a gigantic herd of *Maiasaura* that died in one cataclysmic event such as a volcanic eruption or hurricane. The site is off-limits to the public, but you can drive past and imagine herds of massive "mother lizards" roaming the area millions of years ago.

**Where:** The dig itself is about 25 miles west of Choteau off Teton Canyon Road. Take a left at South Fork Road where it crosses the Teton River and you'll see an interpretive sign after a few miles. The land is private, so you can't actually visit the site. Egg Mountain's geological road sign is at milepost 57.6 on U.S. Highway 287 near Choteau.

**When:** Year-round

**Bonus:** Visit the Two Medicine Dinosaur Center in nearby Bynum, north of Choteau, to see some of the baby dinosaur bones found at Egg Mountain, as well as other remarkable fossils.




## 10 Fly-fish the Blackfoot

We know of three good reasons to fish this bouldery river running west from the Continental Divide toward its confluence with the Clark Fork River just east of Missoula. It's the setting for Norman MacLean's moving autobiographical novel *A River Runs Through It*. It's also the setting for the 1992 same-named movie, directed by Robert Redford and starring Brad Pitt, which helped ignite Montana's fly-fishing boom (though actual filming took place on other Montana rivers). And perhaps most important, it's a great and gorgeous river to fish for westslope cutthroat, rainbow, and brown trout. (Bull trout, which also swim in the Blackfoot, cannot be intentionally fished for and must be immediately released if caught.)

While not the most productive river in Montana, fish numbers per mile are decent. Trout up to 20 inches are caught each summer, though most average 12 to 15 inches. Anglers come here for the scenery and history more than anything else.

**Where:** Most anglers concentrate on the 60 miles from where the North Fork of the Blackfoot enters the Blackfoot, near the town of Ovando, downstream to Bonner, near the Clark Fork confluence. Public access is available either by boat or by wading from several fishing access sites and bridges.

**When:** July, August, and September

**How:** For fishing advice, ask at fly shops in Ovando or Missoula.

**Bonus:** As you fish the river, look north to see the Bob Marshall Wilderness, home to grizzly bears. This is the southern range of the Northern Continental Divide Ecosystem population. The ecosystem begins along the Canada border in Glacier National Park, 150 miles to the north. Grizzlies occasionally roam down to the valley.

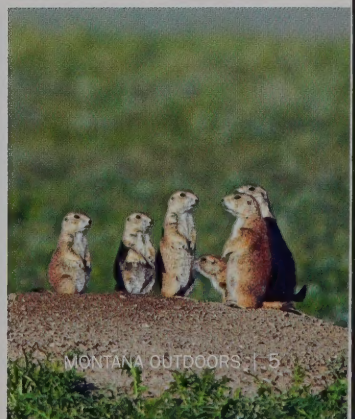
## 9 See a prairie dog town

These lively communities on shortgrass prairie across much of eastern Montana can be endlessly entertaining. Black-tailed prairie dogs are highly sociable rodents that live in small groups, called coteries, comprising a dozen or more adults, yearlings, and young-of-the-year. Several coteries are loosely grouped into wards, and many wards form a town, or colony, ranging in size from a few to several hundred acres. Prairie dogs spend most of their time foraging and watching for predators such as raptors, coyotes, and rattlesnakes. All those barks, squeaks, and squeals you hear are warning messages. New research suggests that prairie dogs may have different "words" for different predators.

**Where:** Throughout central and eastern Montana rangelands. A can't-miss viewing site is Greycliff Prairie Dog Town State Park, 9 miles east of Big Timber on I-90 at the Greycliff exit, and at First Peoples Buffalo Jump State Park, about 14 miles southwest of Great Falls off I-15.

**When:** All year. Activity is lowest during cold spells and most intense in spring.

**Bonus:** Visit Carbon County's Bighorn Basin to see Montana's other prairie dog species, the white-tailed, a state species of concern.





CLOCKWISE FROM TOP LEFT: REBECCA LERNER/FLIRTWAYS.COM; SHUTTERSTOCK.COM; NATURAL HISTORY MUSEUM; BRUNNERBOOKS.COM; NEAL & RO WISHER; ISTOCKPHOTO; UNIVERSAL PICTURES

# 11

## See western grebes conducting their rushing ceremony

At first you won't believe your eyes. During spring mating season on lakes throughout Montana, male and female western grebes line up side by side on the water. Then, in unison, the red-eyed birds lunge forward, moving their webbed feet so quickly their bodies rise completely out of the water as they race for several hundred feet across the surface. During this remarkable feat, called a mating "rush," the birds arch their necks gracefully forward while holding their black wings back.

**Where:** Statewide in marshes and lakes

**When:** Mid-April to early June

**Bonus:** Look for the birds to also perform the "weed ceremony." This involves raising their bodies out of the water and dancing in circles with chests nearly touching, aquatic vegetation dangling from their bills.

# 12 Hunt a Block Management Area

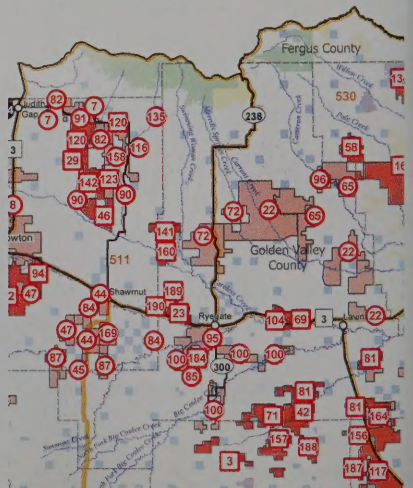
Most hunters in central and eastern Montana have already logged many miles on at least some of the 8 million acres of private land enrolled in Montana's Block Management Program. If you haven't yet hunted a Block Management Area, you owe it to yourself to spend a few days on these publicly accessible lands.

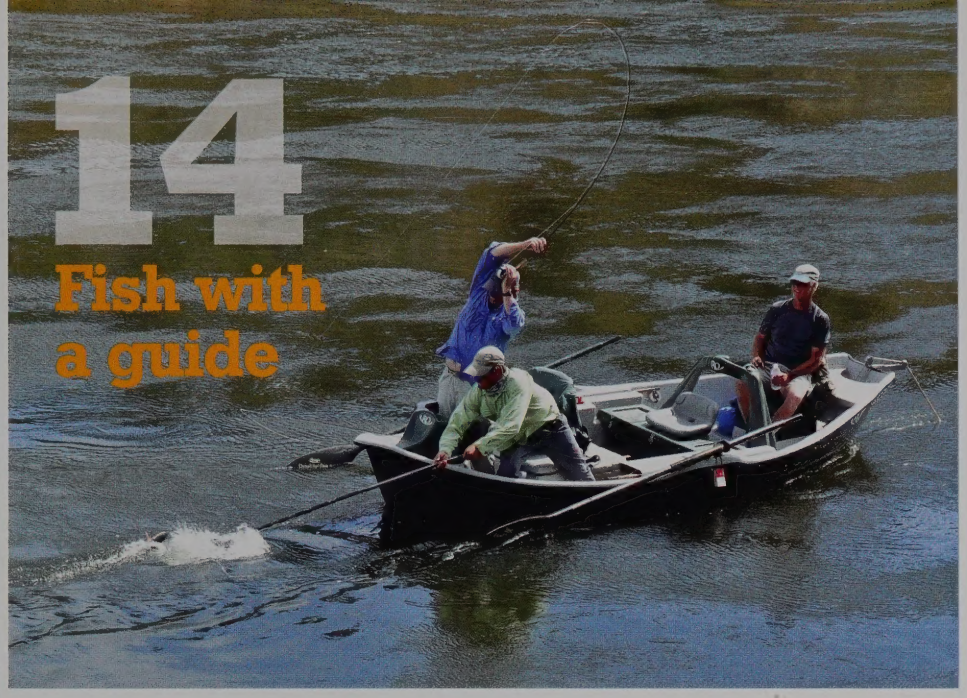
Established in 1986, Block Management is a sensible solution to two problems: One, it gets hunters onto private land, and two, it uses nonresident license dollars to help landowners manage hunting activity while providing a modest cash incentive for enrollment. To top it off, the program builds stronger relationships between hunters and landowners.

**Where:** Statewide, but mainly in the state's eastern half

**When:** Hunting season

**Bonus:** Take part in a summertime landowner appreciation day, often done on Block Management Areas. Hunters fix fences, install gate latches, and tackle other vital ranchland chores. Call your local FWP office for details.





# 14 Fish with a guide

Every dedicated angler should take a guided trip at least once. On new water, a guide can tell you about hatches, patterns, and honeyholes it would take years to learn otherwise. And on water you know well, a guide can reveal new secret spots and techniques you can use on your own for years afterward. Also, by spending hundreds of days each year on the water, guides learn about local history, culture, and personalities, adding another dimension to your angling experience. Best of all, they have superb boat control skills and can position the craft so that your fly lands right where a fish should be. You never cast as well as when an expert is manning the oars.

**Where:** Any major trout river

**When:** Any time of the year. Midsummer trips on blue-ribbon waters are often booked a year ahead of time.

**How:** Ask at local fly shops or visit the Fishing Outfitters Association of Montana website: foam-montana.org.

**Bonus:** The guide keeps only a portion of the daily fee. The rest goes to the outfitter and pays for the shuttle and lunch. So don't forget to tip (customary is 15 to 20 percent of the total).

# 13 Observe mountain goats

Though depicted in artwork standing high atop mountain peaks, in real life these muscular alpine animals are frustratingly difficult to spot. The shaggy, yellowish-white ungulates usually hang out along tall, steep cliffs and are seen most frequently by mountain climbers. Fortunately a few spots exist where the rest of us can catch a glimpse. Frequent sightings occur in Glacier National Park and on the Beartooth Plateau. Mountain goats also congregate at the "mineral lick" just off U.S. Highway 2, which runs along the park's southern border. The lick is an exposed area of the Middle Fork Flathead River bank where the animals consume calcium and other minerals in the clay. A sign indicates a picnic area, where you can pull off and park before walking along a short path to an observation stand. There you can get a good look at the 15 to 30 goats that congregate at the site.

**Where:** The mineral lick is near Essex, 2.5 miles east of the Walton Ranger Station off U.S. Highway 2.

**When:** June and July are top months for viewing here.

**Bonus 1:** The Montana Department of Transportation and Glacier National Park worked together to design a wildlife highway underpass to allow safe passage for goats and other wildlife.

**Bonus 2:** Mountain goats are one of the few species in which adult males are subordinate to adult females and sometimes even juveniles. Biologists suspect this might be due to limited food resources where the animals live, allowing females and young to survive where they might otherwise perish if pushed away by dominant adult males.

# 15 Watch mule deer "stot"

When mule deer run, they sometimes change from their usual stiff-legged gait to a pogo stick–style bounce, called "stotting." It's one way to identify muleys from far away when the deer are moving.

**Where:** Throughout Montana, especially in prairies, river breaks, and mountains

**When:** Year-round

**Bonus:** "Stot" is an old Scottish word that means to bounce or rebound. It is also used to describe the bouncing of playful lambs and African gazelles.

# 16 See the northern lights

We wrote about the aurora borealis at length in the March-April 2013 issue ("Light Up the Night"). The article notes that this year and 2014 will be two of the best during the next decade to see the colorful night sky display.

**Where:** The farther north in Montana the better, though at some times during the year the aurora may be visible from throughout the state.

**When:** The best viewing is around midnight in late fall, winter, and early spring, when nights are longest.

**How:** For viewing tips, search for "Light Up the Night" at fwp.mt.gov/mtoutdoors.

**Bonus:** One of the rarest colors of the northern lights is bright red, which at midnight looks like the horizon is on fire.

## 17 See a running pronghorn herd

The pronghorn is the world's fastest mammal—except for the cheetah, which, eons ago, lived on this continent and is one reason pronghorn evolved to move so quickly. People usually see these prairie speedsters, commonly called antelope, when the animals are either grazing or resting. Once in a while, usually during hunting season, it's possible to catch them in full throttle, racing across the prairie. Pronghorn can sprint at speeds of up to 50 mph for short distances and maintain cruising speeds of up to 25 miles per hour for several miles, easily outpacing predators. Coyotes and golden eagles occasionally nab a fawn, but the only thing these days that can catch an adult (other than an arrow or a bullet) lives 10,000 or more miles away in Africa and Iran.

## 18 Walk along the Old North Trail

The first nomads who visited this region of North America likely came from today's Alberta along the Old North Trail. For 12,000 years, since the last ice age, people have traversed this north-south route along the base of the Rocky Mountain Front, known to the Blackfeet Tribe as *Miisum Apatosiosoko*, or Ancient Trail North. At one time the trail, now mostly obliterated by towns, roads, and lack of use, stretched as far south as Mexico City and extended into northern Alberta. Archaeologists have found physical evidence of the trail using aerial and infrared photography that shows faint depressions indicating travois tracks, as well as by documenting a linear procession of tipi rings and rock cairns. In the late 1990s, local historian Al Wiseman of Choteau and others identified 30 miles of the trail in Teton County and put out 23 etched boulders to mark the route.

According to Wiseman, a Métis and a member of the Little Shell Tribe of Chippewa, the route was used to transport trade goods such as obsidian, furs, and flint. He says the trail sits next to the foothills of the Rockies "because every few miles a stream comes out of the mountains, so there was always a drink of water. If the trail was farther east into the prairie, the rivers get deeper and harder to cross. Also, along the mountains were high ridges where travelers could observe enemies, and the trail was close enough to prairie for hunting buffalo, elk, and antelope."

**Where:** In Montana, the trail historically started in today's Blackfeet Indian Reservation along the Alberta border and moved along the Rocky Mountain Front through Helena and then south. Marked boulders indicating the route have been established by local history buffs in two dozen sites in Teton County.

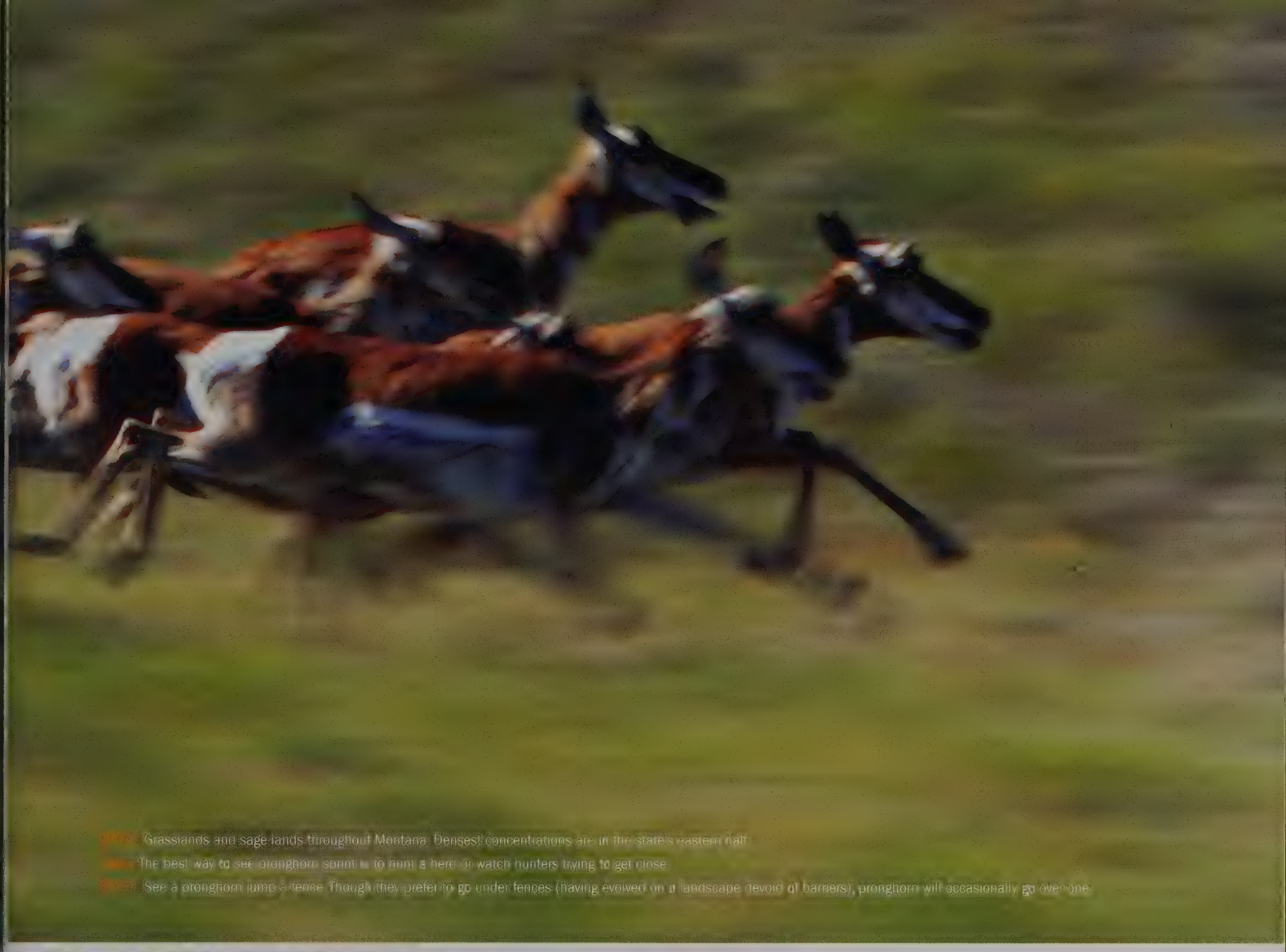
**How:** Visit the Old Trail Museum in Choteau for a map showing boulder locations on public land.

**When:** The museum is open seven days a week, Memorial Day weekend through Labor Day.

**Note:** Don't trespass. Please stay off private land.

**Bonus:** The "Bear's Tooth" near Helena was for thousands of years a landmark on the Old North Trail. It is better known today as the "nose" of the Sleeping Giant, a geographic feature visible from the state capital.

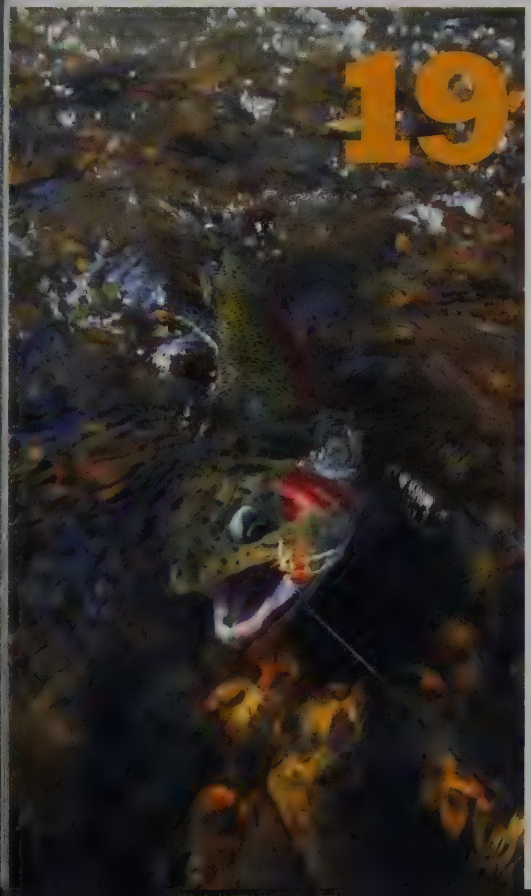
CLOCKWISE FROM TOP: DENVER BRYAN; DENVER BRYAN; PAUL RACZKA



Grasslands and sage lands throughout Montana. Densest concentrations are in the state's eastern half.

The best way to see pronghorn sprint is to hunt a herd or watch hunters trying to get close.

See a pronghorn jump a fence. Though they prefer to go under fences (having evolved on a landscape devoid of barriers), pronghorn will occasionally go over one.



19

## Visit the Varney Bridge section of the Madison River

This hallowed water is where wild river trout management in the United States began. Half a century ago, FWP biologists suspected that stocking trout in rivers was harming Montana's wild fish populations. The scientists put their hunch to a test. In 1970, led by biologist Dick Vincent and supported by fisheries chief Art Whitney, the then-named Department of Fish and Game tried a controversial experiment. It discontinued stocking the Madison River's Varney Bridge section, from the bridge 4 miles downstream to Ennis. Meanwhile they stocked, for the first time, a 1.4-mile stretch of nearby O'Dell Creek, which held a healthy trout fishery. The results were startling: By 1974 the number of trout over 10 inches in the Madison study section increased from 1,500 to 4,700 per mile, while numbers of trout in the O'Dell Creek stretch dropped from 515 to 280.

Later research in Montana and other states showed that the addition of hatchery trout disrupts the important social structure of wild fish, pushing existing trout out of holding lies and causing them to race around and challenge both stocked fish and other wild fish. The displaced wild trout move upstream and downstream, while the unwary hatchery fish are quickly caught by anglers.

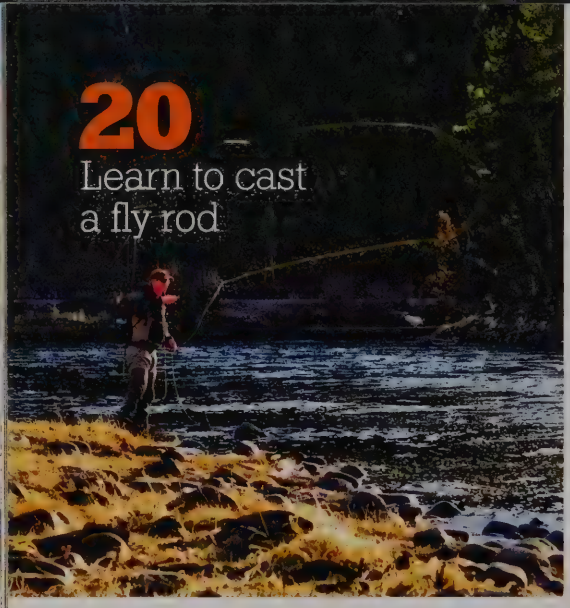
Though counterintuitive, the result of adding more fish is an overall population decline.

FWP stopped stocking hatchery fish in rivers in 1974, and the rest is history. Wild trout numbers in rivers across western Montana have long since increased, as the study showed they would.

**Where:** The Varney Bridge Fishing Access Site is 7 miles upstream from Ennis, off either Montana Highway 287 or County Road 249.

**When:** Anytime

**Bonus:** Also stop and look at O'Dell Creek. Montana Highway 287 crosses the stream about a mile east of Ennis.



# 20 Learn to cast a fly rod

Yes, it's a joy to gracefully send 60 feet of fly line arcing through the air to carry an eyelash-sized fly to a distant target. But no, Montanans do not naturally possess that talent, despite the myth that babies here are born making double hauls and aerial mends. Fly casting is a skill that has to be learned. Fortunately, anyone can learn how. Fly shops offer lessons, as does FWP's Becoming an Outdoors-Woman Program. Or ask a skilled neighbor to show you how at a nearby park or ballfield.

Where: Anywhere you can find an instructor or helpful friend

When: Anytime

How: Written instructions are of little help. Online videos are only slightly better. The only way to learn is to have someone watch your casting and provide pointers. One place to pick up fly casting basics is from FWP's Becoming an Outdoors-Woman Program: fwp.mt.gov/education/bow.

Bonus: Learn to cast a Spey or two-handed rod, created in Scotland for fishing Atlantic salmon waters; in recent years it has caught on in the United States for fishing big rivers.

# 21 Learn to read a topo map

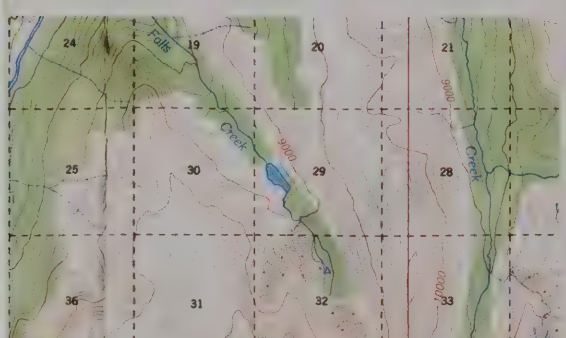
One of these days while hiking the backcountry, the GPS on your smartphone will be out of satellite range. Then you'll be stuck not knowing where on earth you are and how to get back. Now is the time to learn how to read a topo map so you can carry one and use it on future hikes.

Where: Anywhere you could become lost

When: Anytime

How: The Internet has easy online instruction, such as at howstuffworks.com.

Bonus: Once you learn to use a topo map and compass, try heading outdoors without your GPS. Scary, yes, but people have done it for eons and lived to tell about it.




# 22 Visit a pishkun (buffalo jump)

Armed only with spears and bows, American Indians were faced with the challenge of killing bison, an essential source of food that weighed up to a ton or more. The solution for thousands of years was to herd the animals off hilltops to their deaths. These killing cliffs are known as pishkuns, or buffalo jumps.

Buffalo jumps were sacred sites where vast amounts of protein, hides, bones, and other materials could be harvested. They were also extremely dangerous. The bison didn't jump, by any means. They were herded by Indians running along "drive lanes" lined by hundreds of rock cairns and funneled to the cliff edge by others waving blankets or lighting fires. Once the bison tumbled over, most didn't immediately die and had to be killed at close quarters with spears and rocks. *Pishkun* is a Blackfeet Indian word loosely translated as "deep blood kettle," referring to the gory basins below the cliffs.

Where: First Peoples Buffalo Jump State Park, southwest of Great Falls, is the site of what may be the world's longest pishkun, extending nearly 1 mile. Another pishkun is at Madison Buffalo Jump State Park, just south of I-90 between Three Forks and Belgrade at the Logan exit.

When: Both parks are open year-round.

Bonus: A buffalo jump diorama that includes a bison seemingly suspended in midair is displayed at the Montana Historical Society Museum in Helena.

ALL PHOTOS THIS PAGE: SHUTTERSTOCK, EXCEPT *BUFFALO DRIVE*, OIL ON CANVAS BY WILLIAM R. LEIGH, 1947. BUFFALO BILL HISTORICAL CENTER, CODY, WYOMING

# 23 Hike while carrying bear pepper spray

There's something about hiking, camping, or hunting in an area where grizzly bears live. Though these large carnivores almost never attack people, it does happen. That's why, in grizzly country, you look around more carefully and continually scan the trail for tracks or scat. And why the sight of a large brown stump can make your heart skip a beat. Roaming where grizzlies roam is exciting and occasionally unsettling. A canister of bear pepper spray on your hip is a reminder that in some places we are not on top of the food chain.

Where: Grizzly bears are found throughout western Montana.

When: Spring, summer, and fall

Note: Carry bear pepper spray and keep it handy. The aggressive aerosol repels bears more effectively than a firearm without killing or wounding the animal.

Bonus: Learn how to effectively use bear pepper spray at the FWP website or from seminars sponsored by the department and the Missoula-based Center for Wildlife Information.

# 24 See the Chinese Wall

It takes a lot of work to view this vast 1,000-foot-high limestone escarpment that extends 15 miles along the Continental Divide in the heart of the Bob Marshall Wilderness. But what a reward! Part of the Lewis Overthrust, the wall was created millions of years ago when the earth's crust split. The west side tipped up from the center and the east side slid under and pushed the other side up, forming this long cliff named after the Great Wall of China.

Seeing the Chinese Wall requires a multiday backpacking trip (though some ultradistance runners have made it from the trailhead to the wall and back in one long day). Most people start at Benchmark Trailhead, reached from Augusta. The first day's hike takes you to Indian Point, and the next day you reach the wall. The hike runs along the Continental Divide National Scenic Trail.

Where: The wall is about 40 miles west of Augusta deep in the Bob Marshall Wilderness.

When: July through September

Note: This is the heart of grizzly country. Carry easily accessible bear pepper spray at all times.

Bonus: A spur off the trail along the West Fork of the South Fork Sun River climbs the wall to a lookout on the summit of Prairie Reef (8,868 feet). The views in all directions are wonderful.

# 25 Drive around Flathead Lake

To fully appreciate this massive, shimmering expanse of water, consider taking an afternoon to drive completely around it. At 192 square miles of surface area, Flathead is the largest natural lake west of the Mississippi River. It was created when glaciers of the last ice age retreated and carved out a trench that filled with water, in some places as deep as 371 feet. Several islands dot the lake, adding to its beauty.

Camping and picnic tables are available at five Montana state parks around the lake. They become crowded in summer, however, and campsites especially fill up quickly. The clear water is great for kayaking and swimming, though it can be chilly until about mid-August.

Where: Northwestern Montana between Polson and Kalispell

When: Anytime, but the cooling breezes off the lake are most welcome in July and August.

How: Follow any road map.

Bonus: Since the late 1800s dozens of people have reported seeing a large creature in the lake. The "Flathead Monster" is usually described as being between 20 and 40 feet long with humps on its back, black eyes, and an eel- or snake-like body. Fisheries biologists have scoured the lake for decades and never found any sign of such a large aquatic animal. Still, the lake is deep enough that a large creature could easily avoid detection...

CLOCKWISE FROM TOP: JEFF J. ALBRECHT; LINDA THOMPSON, LOS ANGELES TIMES

# 26 Visit a hunter check station in November

In several parts of rural Montana, the social center each fall is not a sports bar or VFW hall but the FWP hunter check station. People stand around and drink coffee until a pickup pulls in with antlers or hooves sticking up from the bed. Onlookers head over to see the elk or deer, much discussion ensues, and then the truck drives off and the wait begins again.

Hunters are required to stop at check stations and inform FWP staff and volunteers of their success or lack thereof. Crews measure elk and buck antler beams, count tines, and estimate age by looking at the wear on molars. Check stations monitor the ratio of successful to unsuccessful hunters, give FWP a real-time look at harvest success, and provide wildlife biologists with information used to help set the following year's hunting regulations. To monitor large carnivore populations, crews also ask hunters if they've seen any mountain lions, grizzly bears, or wolves.

FWP sets up check stations in Augusta, Bonner, Darby, Anaconda, Big Timber, Cameron, Dillon, Lavina, Broadview, Billings, Big Timber, and several other sites. Some are simply pickup trucks on the roadside; others are portable trailers or even cabins where FWP staff enter data into computers and stay warm. The public is welcome to hang out.

Where: Statewide. See list above.

When: During the five weeks of big game season from late October to the Sunday after Thanksgiving

Bonus: Check stations are always looking for volunteers. Call your regional FWP office in August, when biologists are scheduling the stations, to learn how to help.

## 27 Get stuck in gumbo

No one can say they've truly experienced eastern Montana without getting their vehicle—or at least a foot—stuck in this highly adherent muck.

Gumbo is a heavy clay soil found throughout the state's eastern half between the Yellowstone and Missouri Rivers. Types include Houston black gumbo, mudstone, and Bearpaw shale. When wet, gumbo becomes both slick and sticky. Because the soil particles are flat, they slip and slide against each other when lubricated by water, like wet sheets of waxed paper. The water also increases the soil's adhesive properties, the same as when moistened flour turns sticky. To make matters worse, the bonding force of gumbo increases as it dries, so it adheres to boots and tire wells like concrete.

Where: The Missouri River Breaks around Fort Peck Lake is notorious for gumbo.

When: The stickiest season is after snowmelt in March and any time after a rain.

Bonus: As you sit waiting for the sun to shine and dry up the gumbo, imagine what it must have been like 120 years ago to push a covered wagon or a plow through that sticky soil.

## 28 See a burrowing owl

These adorable raptors are the only owls in Montana that live underground, nesting and roosting in abandoned prairie dog and ground squirrel burrows. Once abundant throughout the Great Plains, burrowing owl numbers have been reduced in Montana to fewer than 900 nesting pairs.

Where: Open grasslands throughout eastern and central Montana. Greatest concentrations are in Phillips, Valley, and Big Horn Counties. Find prairie dog towns then search the edges for owls.

When: Midsummer. The birds migrate south in fall.

How: Drive around BLM prairie lands in the morning and look for the birds perched on prairie dog mounds or wooden fence posts.

Tip: Ask local wildlife biologists, BLM office staff, or Audubon chapter members where to see burrowing owls.

Bonus: When threatened, young burrowing owls, called owlets, emit a loud noise that sounds like the rattle of a rattlesnake.

## 29 Visit Bighorn Canyon

The 55-mile-long Bighorn Canyon is a scenic gorge that frames Bighorn Lake, an impoundment created in 1956 after completion of Yellowtail Dam. Below the dam, the Bighorn River's blue-ribbon stretch begins; upstream, extending south well into Wyoming, is the massive reservoir that weaves back and forth between thousand-foot cliffs. Your best view of the breathtaking geologic formations is at the Devils Canyon Overlook, accessible from Lovell, Wyoming.

The canyon and reservoir are part of the Bighorn Canyon National Recreation Area, operated by the National Park Service. After stopping at the informative visitor center in Lovell, follow Wyoming Highway 37 north up onto the desert plateau and continue past the turn for Horseshoe Bend to Devils Canyon. On the way you'll enter the Pryor Mountain Wild Horse Range, where you might see Spanish mustangs and bighorn sheep. Once at the overlook, brace yourself. Views of the deep, dramatic canyon are often compared to those of the Grand Canyon.

For an entirely different perspective—from the water looking up—enter the canyon by boat from Yellowtail Dam in Montana.

Where: The canyon is in south-central Montana south of Billings along the Wyoming border.

When: The recreation area and visitor center in Lovell, Wyoming, are open seven days a week except on holidays. The area is brutally hot in July and August, which makes for uncomfortable hikes but refreshing swims in the reservoir's clear, cold waters.

Bonus: As Wyoming Highway 37 nears its end point at Barry's Landing, you'll see signs for Hillsboro. This ghost town, originally built by G.W. Barry, an early white settler, contains many original buildings.

## 30 Backpack the famous Beartooth Traverse

If you take just one multiday backpack trip in your lifetime, make it the Beartooth Traverse, also known as the Beaten Path. This three- to five-day trip has it all: waterfalls, trout-filled alpine lakes, rocky summits, deep canyons, wilderness, wildflowers, sparkling streams, and grizzly bears. The hike is by no means secret and you definitely won't be alone—unless it's late September, when snowfall is a real possibility. But go anyway. With all the jaw-dropping scenery this trip offers, you'll hardly notice other backpackers.

Where: The heart of the Absaroka-Beartooth Wilderness

When: Late June through late September, depending on snow conditions

How: Most backpackers begin at East Rosebud Trailhead, which you can reach from Columbus via Montana Highway 78 then a series of gravel roads. Clarks Fork Trailhead at the other end is off U.S. Highway 212 about 5 miles east of Cooke City. Whichever trailhead you start at, you'll need to arrange a shuttle unless you hike there and back.

Bonus: Explore the alpine beauty around Fossil Lake, considered one of the most beautiful landscapes in Montana.

# 31 Catch a walleye

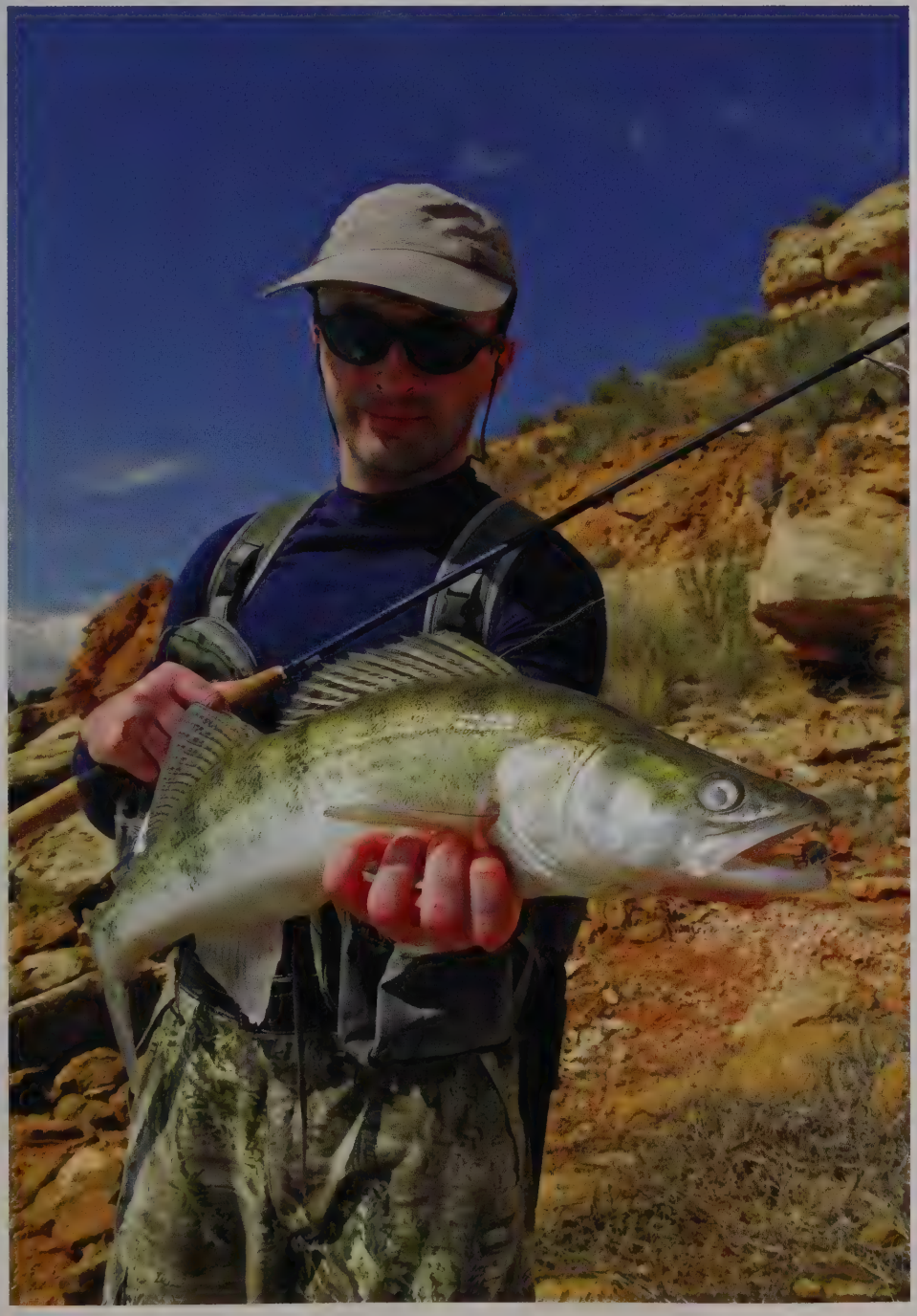
Montana is well known for its trout, but the walleye, a relative newcomer, has definitely made a name for itself. Walleye are members of the perch family and, like perch and the Montana native sauger, are prized for their white, bone-free fillets. Catching them usually requires a boat—to cover lots of water and reach the depths where walleye hang out in midsummer. The exception is in May and October, when the fish cruise shallows at dawn and dusk searching for bait fish and can be caught from shore by casting crankbaits. Though a dozen or so Montana reservoirs hold these glassy-eyed fish, some stocked by FWP and some maintaining naturally reproducing populations, the state's most famous walleye waters are Canyon Ferry and Fort Peck.

Where: Fort Peck Lake is just south of Glasgow, while Canyon Ferry is southeast of Helena.

When: The fishing is hottest in both reservoirs in July. Shorefishing is best in May and October.

How: Anglers generally pick up walleyes in midsummer using a 'crawler harness. For details, ask at local bait shops. Expert walleye guides are available at local bait shops and marinas. A full day of fishing for two people costs $400 to $500 plus tip.

Bonus: If you catch a walleye, take a close look at the eye. The coating reflects light and allows the fish to see in dark water. The name "wall" eye likely derives from the Icelandic word *vagl* (pronounced "woggle"), which means "cloudy."



# 32 See the world's largest western larch

The biggest western larch in the nation stands over 153 feet tall in a grove near the town of Seeley Lake. Tree experts estimate it to be roughly 1,000 years old. Though other western larches are taller, the Seeley Lake giant, known locally as "Gus," has the combination of height, circumference (22 feet), and crown spread (34 feet wide) to make it the top-scoring western larch (commonly called tamarack) in the United States.

Where: Gus grows in the scenic Jim Girard Memorial Grove of the Lolo National Forest along the shore of Seeley Lake on Boy Scout Road.

When: April through December

Bonus: Visit in late October to see the golden needles of Gus and his fellow western larch.

# 33 Fish all of Montana's blue-ribbon rivers

All anglers should fish, at least once, every single one of the 12 great waters that FWP categorizes as "blue-ribbon" rivers. These streams are designated for their productivity, number of different game fish, use by anglers, accessibility, and aesthetics. In alphabetical order: the Beaverhead, Big Hole, Bighorn, Blackfoot, Flathead (main stem), Flathead (North Fork), Gallatin, Kootenai (below Libby Dam), Madison, Missouri (from Holter Dam to Cascade), Rock Creek, and Yellowstone Rivers.

Where: Statewide, though most are in the state's central and western regions

When: The best fishing is July through October.

How: Check with local fly shops for specific hatches and flies, and with bait shops for hot lures and bait.

Bonus: Achieve what we at *Montana Outdoors* call the "Blue-Ribbon Grand Slam" by catching at least one fish from all 12 rivers within a calendar year.

CLOCKWISE FROM BOTTOM LEFT: PETER GROSSHAUSER/ISTOCKPHOTO; GREG HANEY; SHUTTERSTOCK; TONI BAUER; MISSOULIAN; MONTANA OUTDOORS; SHUTTERSTOCK;

## 34 See a swift fox

Considered locally extinct in Montana in 1969, this small prairie fox was rediscovered in 1996 near the Canadian border north of Havre. The animals were products of a Canadian reintroduction a decade earlier of 900 swift foxes into southern provinces. Many of the cat-sized canids journeyed south of the international border and began reestablishing themselves on Montana prairies. "The most beautiful fox that I ever beheld," is how Meriwether Lewis described the species in 1806. Often exhibiting a light orange hue, it was called "yellow fox" by pioneers, who marveled at the small carnivore's inquisitive nature. Named for its lightning speed, which can reach nearly 40 miles an hour in a sprint, the swift fox is the smallest member of the dog family in North America, standing roughly 12 inches tall and weighing just 5 pounds (about half that of a red fox).

Most sightings are between the Hi-Line and the Canada border, from Havre to Glasgow. Swift foxes have also been reintroduced to the Blackfeet and Fort Peck Indian Reservations by tribal biologists. Look in open prairies and arid plains, including areas intermixed with winter wheat.

The species is mostly nocturnal, so sightings rarely occur in daytime.

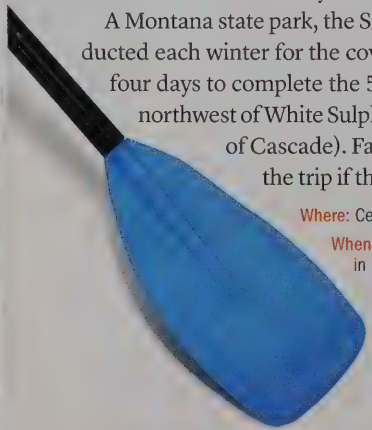
The best way to spot these animals is to drive across BLM lands in summer at night and scan the landscape with a searchlight.

Because Canada and the United States no longer carry out large-scale predator and rodent poisoning programs, swift foxes are thriving in a region from which they had all but disappeared.

## 35 Float the Smith

One of the state's most sought-after river adventures is not in the remote Scapegoat Wilderness or scenic Glacier National Park but in central Montana between Helena and Great Falls. Here flows the Smith River, a prolific trout stream running past limestone bluffs and lush green meadows in a remote region without roads, bridges, or towns. The float is leisurely, with only minor whitewater skills required and plenty of time available each day for fishing or naps (or both).

A Montana state park, the Smith River has become so popular that a lottery is conducted each winter for the coveted multiday float permits. On average, visitors take four days to complete the 59-mile stretch from the Camp Baker put-in (10 miles northwest of White Sulphur Springs) to the take-out at Eden Bridge (6 miles east of Cascade). Fans of the float say they would take 40 days to complete the trip if they could.



Where: Central Montana's Little Belt Mountains

When: The float season runs from April through October. Most floats take place in May and June. Starting in July, the river gets too low for drift boats and rafts.

How: Applications for the Smith River permit lottery are accepted between early January and mid-February. For more information, visit stateparks.mt.gov/smith-river.

Bonus: With the help of friends providing vehicle shuttles, two now-retired FWP employees paddled the entire 59-mile Smith River float stretch *twice* in one day in a tandem canoe.

## 36 See beargrass in bloom

Though it looks like a grass, *Xerophyllum tenax* is actually a member of the lily family that grows over 4 feet tall. When in bloom, beargrass has been described as resembling a white club, foaming stalk, or glowing candle. Though bears don't care for beargrass, mountain goats consume its leaves and elk, deer, and bighorn sheep eat the blossoms.

Where: Subalpine meadows throughout western Montana. Glacier National Park visitors regularly see beargrass in July.

When: July and August, depending on elevation

Bonus: This plant was long used by Native Americans, who dried the fibrous leaves and wove them into tight, waterproof baskets.

## 37 Look for shed antlers

Searching for antlers can be like an Easter egg hunt, a way for adults and kids alike to participate in a traditional spring outing. Many people go out just to enjoy a day afield. More dedicated "horn hunters" aim to enhance their collections with big antlers or the highly prized matched pair. (They are not in fact seeking horns, which don't drop off animals.) Some search for antler sheds to learn more about bulls and bucks they saw the previous fall. Others do it for the money, selling their finds to antler brokers, who in turn sell the bone to Asian markets and local craftsmen.

So popular has shed hunting become that some kennels have begun to train and sell dogs that locate and retrieve fallen antlers in the wild.

Find sheds by roaming areas where deer and elk winter. Get out in early spring before new vegetation obscures fallen antlers. Hike to high vantage points and scour the ground with binoculars, looking for hints of white or ivory that could indicate a shed.

Beavers, ground squirrels, and other rodents chew on antlers to gain calcium and wear down their teeth, so the discarded headgear often doesn't last longer than a year in the wild.

The only problem with shed hunting—other than the difficulty of finding the darned things—is that people sometimes enter restricted areas and inadvertently harass elk in early spring when the animals are in weak physical condition. Biologists say the added stress can cause abortions in pregnant elk and low calf birth weights.

Where: Spring after snowmelt

When: Throughout Montana where deer and elk winter. The most popular areas are FWP wildlife management areas, which open to shed hunting each year on May 15 or early June, depending on the area.

Bonus: Occasionally shed hunters find a matched pair of antlers. An even more precious find is a moose antler. Locating a matched pair of moose antlers is so unlikely it would almost invite a criminal inquiry.

## 38 Go ice fishing

Some people—actually, it's most people—would rather watch a blank TV screen than spend an afternoon standing on ice staring at a bobber. But let's face it: Montana is a cold state and, other than skiing, there's not much to do outdoors between Thanksgiving and Valentine's Day other than ice fish. Everyone who lives here should at least once walk onto a frozen lake (ensuring safe thickness beforehand), drill a hole through the ice, lower a bait-tipped hook into the water, and then spend an hour or two waiting for a bite while stomping to keep their toes from freezing.

Call it a rite of passage into the culture of us northern people.

Where: Montana's top ice-fishing waters include these lakes and reservoirs: Georgetown, Mary Ronan, Upper Thompson, Salmon, Holland, Placid, Canyon Ferry, Holter, Hauser, Fresno, Tiber, Nelson, and Fort Peck.

When: Early ice and late ice are best because the fish are closer to shore. But that's also when ice is thinnest, so be careful.

How: Ice-fishing basics are available on many websites. Get tips and gear from sporting goods stores.

Caution: General guidelines for ice safety: at least 4 inches thick for walking and 8 inches thick for vehicles

Bonus: Ice anglers are friendly (and often bored), so feel free to walk around and visit. Try to find someone with an underwater camera and ask if you can look through it to see what's going on below the frozen surface.

## 39

### Admire William Clark's signature at Pompeys Pillar

Lewis and Clark were the first explorers of European descent to document many species of fish, wildlife, and native plants in this part of North America, including the westslope cutthroat trout, sage-grouse, Clark's nutcracker, black-tailed prairie dog, and buffaloberry.

No visual evidence of the Corps of Discovery's journey remains except at a single site: the base of Pompeys Pillar, a 150-foot limestone outcropping rising from the Yellowstone River Valley. Here Captain William Clark carved his signature into the stone, and seeing it can give you shivers (yes, he truly was here). Clark's partner, Captain Meriwether Lewis, at the time was 275 miles to the northwest exploring the upper Marias River. The two crews met up a few months later in today's North Dakota.

Captain Clark named the pillar "Pompys Tower" in honor of Sacagawea's son, Jean Baptiste Charbonneau, whom he had nicknamed "Pompy." Nicholas Biddle, first editor of the Lewis and Clark journals, changed the name to "Pompeys Pillar."

In 1882 the Northern Pacific Railroad placed an iron grate over the signature to protect it from thieves and vandals. In 2001 the site was designated as a national monument and placed under management of the Department of the Interior's Bureau of Land Management.

Where: 25 miles east of Billings off I-90

When: Year-round

Bonus: Look around the base of the pillar for petroglyphs thought to be made by Shoshone Indians who lived in the area before the Crow and Cheyenne Tribes arrived.

# 40

## Ask permission to hunt private land

Montana contains 32 million acres of public land and another 8 million acres of private property enrolled in Block Management. So you don't really *need* to motor up the driveway, endure barking dogs, and work up the nerve to knock on that door. But all hunters should do it anyway, at least once.

The process reminds us of how important landowners are to Montana's wildlife. East of the Continental Divide, most wildlife lives on private property. If landowners didn't tolerate geese eating their winter wheat, deer grazing their alfalfa fields, and elk knocking down their fences, Montana would have far fewer game animals.

Asking permission also puts you face to face with a landowner. Even if your request is turned down, you have met that Montanan, and he or she you. "Landowner" and "hunter" become, at least for a moment, actual human beings and not members of interest groups. And if you receive permission—well, that giddy feeling can be akin to asking someone on a date and getting a positive reply. To some hunters, trying to obtain permission is as thrilling a challenge as the hunt itself.

Where: Statewide

When: It's most polite—and effective—to ask permission weeks or even months before hunting seasons begin. Once seasons open, landowners are swamped with requests.

Bonus: Find landowner names on Montana's official public and private land ownership map website (nris.mt.gov/gix/ownmaps.asp). The online maps show all private lands and include a list of landowners (though not their addresses or phone numbers, which you'll need to find elsewhere).

# 41

## Call in a tom turkey

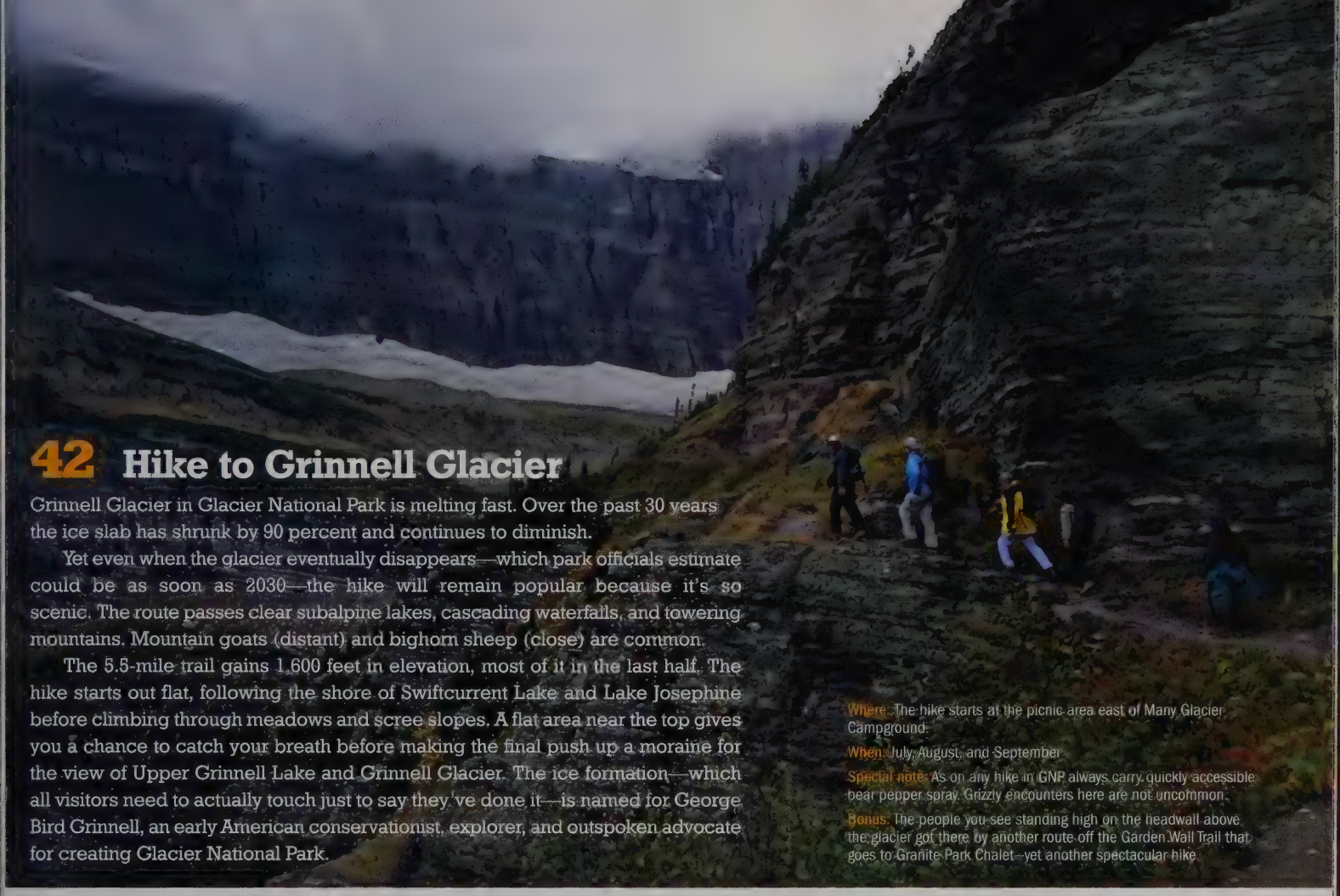
Whether armed with a shotgun with intent to shoot or just doing it to see one up close, enticing a gobbler into close range will send your heartbeat into overdrive. Calling is done during spring mating season, from April through May, when the male birds, called toms or gobblers, are gathering harems of hens for mating. Often a loud *yelp-yelp-yelp-yelp-yelp* made on a box, mouth, or other call will elicit the classic *gobble-gobble-gobble* from a tom. If all goes as planned and you don't overcall, the curious turkey will slowly walk your way, his head weaving back and forth trying to see if you are the hen you pretend to be. And the closer he gets, the harder your heart beats. Often gobblers "hang up" about 100 yards away, too suspicious to venture closer. That's fine for watching the birds, which puff up and strut in circles, but it's frustrating for anyone holding a shotgun, which has a killing range of less than half that distance.

Where: Wild turkeys are found throughout much of Montana but especially in the southeastern and south-central regions (home to the Merriam's subspecies) and the Flathead area (home to the Eastern subspecies). Look for turkeys in forested areas with water and open fields. They often hang around ranches and farmsteads in winter.

When: Gobbling can start as early as mid-March and carry on through mid-May.

How to call, hunt, or both: Hunting wild turkeys requires a special license and, in some areas, a permit. See FWP for details. The Internet and hunting magazines are filled with how-to advice on calling and hunting.

Bonus: Wild turkeys are not native to today's Montana. Historically they could not survive this far north and ranged only up into central Colorado (Merriam's subspecies) and southern South Dakota (Eastern subspecies). Increased agriculture has provided wild turkeys with enough calories so they can survive in more northern latitudes, where they have been stocked by wildlife agencies and volunteers.



## 42 Hike to Grinnell Glacier

Grinnell Glacier in Glacier National Park is melting fast. Over the past 30 years the ice slab has shrunk by 90 percent and continues to diminish.

Yet even when the glacier eventually disappears—which park officials estimate could be as soon as 2030—the hike will remain popular because it's so scenic. The route passes clear subalpine lakes, cascading waterfalls, and towering mountains. Mountain goats (distant) and bighorn sheep (close) are common.

The 5.5-mile trail gains 1,600 feet in elevation, most of it in the last half. The hike starts out flat, following the shore of Swiftcurrent Lake and Lake Josephine before climbing through meadows and scree slopes. A flat area near the top gives you a chance to catch your breath before making the final push up a moraine for the view of Upper Grinnell Lake and Grinnell Glacier. The ice formation—which all visitors need to actually touch just to say they've done it—is named for George Bird Grinnell, an early American conservationist, explorer, and outspoken advocate for creating Glacier National Park.

Where: The hike starts at the picnic area east of Many Glacier Campground.

When: July, August, and September.

Special note: As on any hike in GNP, always carry quickly accessible bear pepper spray. Grizzly encounters here are not uncommon.

Bonus: The people you see standing high on the headwall above the glacier got there by another route off the Garden Wall Trail that goes to Granite Park Chalet—yet another spectacular hike.

## 43 See the fall golden eagle migration at Rogers Pass or Bridger Mountain Ridge

Each fall golden eagles and other raptors ride thermals along mountainsides on their journey from as far north as the Arctic Circle to wintering grounds in Mexico and Central and South America. Two sites in Montana that see the greatest golden eagle concentrations during this time are at Rogers Pass along the Rocky Mountain Front and Bridger Mountain Ridge just north of Bozeman. Both spots are geologic bottlenecks that concentrate raptors and allow for a remarkable number of sightings.

Volunteers at both sites monitor golden eagle numbers as part of projects coordinated by HawkWatch International, Raptor View Research Institute, and Montana Audubon.

Where: The **Rogers Pass area** is on Montana Highway 200 between Lincoln and Great Falls. A marked pullout on the road's north side a few miles west of the intersection with Route 434/435 indicates the Rocky Mountain Front Eagle Migration Area with an "Eagle Watch" sign. See migrating raptors there and at any unmarked pullouts between there and Rogers Pass. (For an even better view, hike the Continental Divide Trail 1 mile to the north.) **Bridger Mountain Ridge** is 16 miles northeast of Bozeman on Montana Highway 86 (Bridger Canyon Drive). Once at the ski area, follow the main road to the right of the base lodge until you get to the gate and a small parking lot. From there take the strenuous half-mile uphill hike to the top of the ridge.

When: Eagle numbers peak during the first two weeks of October.

How: Wear camo or muted colors. Birds discern colors and will stay farther away if they see bright reds, oranges, yellows, and greens. Spotting scopes are helpful, and binoculars are essential.

Bonus: Volunteer to count golden eagles at Bridger for the Montana Audubon Society. E-mail shoffman@mtaudubon.org.

CLOCKWISE FROM TOP LEFT: STOCK.XCHNG, DONALD M. JONES, BEN GILLARD, STEVE EVANS

## 44 Go on an outfitted backcountry trip

Using horses, outfitters can take you farther into the backcountry in far less time than it would take to walk. They can also carry more gear and better food, and allow for more comfort once you get there. What's more, because your eyes are a few feet higher than when you walk, riding a horse provides you with a great way to see the landscape.

Horses are the "real" West, a world of stiff ropes and specialized knots, of canvas and leather. And these horse-propelled outings aren't just for hunters. Outfitters increasingly run "pack trips"—multiday adventures that take anglers into backcountry lakes and streams, wildflower fans to alpine meadows, and other nature lovers to remote places where they can see grizzlies, elk, bighorn sheep, moose, wolves, and other watchable wildlife.

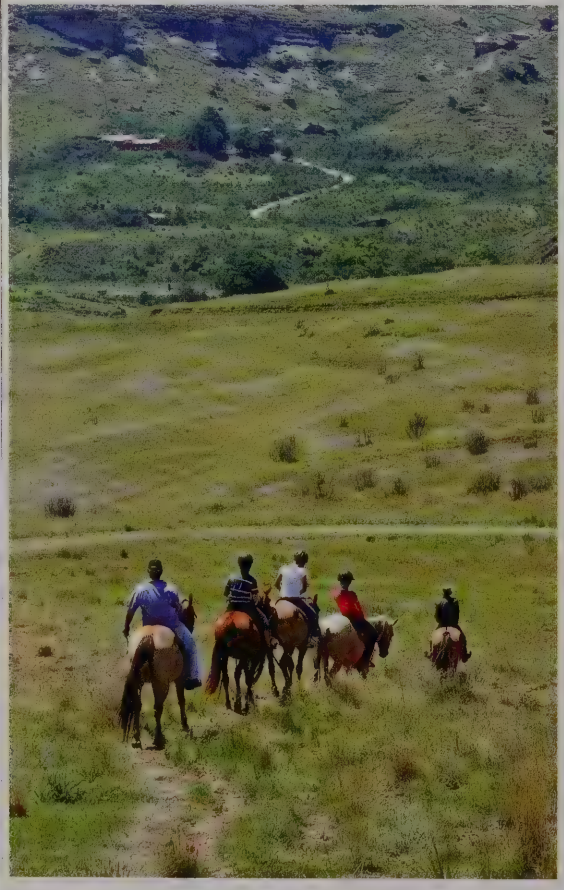
Riding experience is not required. Outfitters usually have a wide range of horses—including calm, gentle ones—to fit the needs of all guests.

**Where:** Throughout Montana

**When:** Summer for fishing and wildflowers, fall for wildlife watching and hunting

**How:** The Montana Outfitters and Guides Association (montanaoutfitters.org) provides information on finding an outfitter to suit your needs.

**Bonus:** Bone up on packer terminology beforehand, including "lash cinch," "breast collar," "hoof boots," "conway buckle," and "pack string."



## 45 Spot a white-tailed ptarmigan

If you manage to see one of these uncommon alpine birds, you know you're at a high elevation. White-tailed ptarmigan are the smallest member of the grouse family in North America, averaging about a foot long and weighing less than a pound. In summer they are a mottled gray-brown with a white tail, underside, and wings. During fall both sexes become a reddish brown, and then turn white by early winter.

This is the only ptarmigan species found south of Canada. In Montana, the bird lives above tree line in a few mountain ranges across the state's northwestern region.

**Where:** The white-tailed ptarmigan is found almost exclusively above timberline, summer and winter. Most sightings take place in Glacier National Park in alpine areas containing dwarf willow, heath, and mosses.

**When:** In May and June the birds breed in areas that have water and willow shrubs nearby. After her chicks hatch, a hen and her brood spend summer in moist meadows containing boulders and lush vegetation.

**How:** There's no telling where ptarmigan will show up. The best way to find them is to hike extensively throughout northwestern Montana's alpine areas in and around GNP.

**Bonus:** The bird's feathered legs and feet act as snowshoes so it can walk atop snow.

## 46 Hear a wolf howl

Not many people have seen a wolf. The canids stick to deep timber and generally shun humans and roads. The exception is in Yellowstone National Park, where wolves have become accustomed to people and can be regularly seen, especially during winter.

Since regulated hunting seasons began in 2009, the large carnivores have learned to become elusive in Montana. That's why hearing a wolf howl is far more likely than seeing one. Camp or hike into backcountry areas where wolf packs live. Listen at dawn or dusk. You can even try eliciting a response by giving a few howls of your own (though that's not recommended during hunting season in fall and winter).

**Where:** Most packs live in northwestern Montana, but wolves can be found throughout the state west of the Continental Divide. Visit the FWP website and search for "Wolf Distribution" for a rough idea of where packs live.

**When:** Wolves howl year-round but are most vocal in winter, especially during the breeding season in January and February.

**Bonus:** One of the main reasons wolves howl is to identify each other over long distances. It's a way for wolves in a pack to reunite with each other after separation. Wolves also howl to claim territory and announce their presence to other packs.

CLOCKWISE FROM FAR LEFT: SHUTTERSTOCK; RONAN DONOVAN; CHUCK HANEY; CRAIG & LIZ LARCOM; THREE WOLF MOON BY ANTONIA NESHEV

## 47 See Kootenai Falls

The Pacific Northwest is home to many large waterfalls that, over the past century, have been dammed to produce hydropower. One exception is Kootenai Falls, a scenic series of cascades along the Kootenai River east of Libby and one of the largest waterfalls in Montana. The river here drops 300 feet in elevation over a few hundred yards; several rafting scenes from the Meryl Streep thriller *The River Wild* were shot from the site. The adventurous can walk out on a swinging footbridge downstream from the falls. Look for expert kayakers playing in the tumultuous rapids below and keep an eye out for bighorn sheep grazing on cliffs on the river's east side.

Where: Look for the turnoff 5 miles west of Libby on U.S. Highway 2. Follow the short trail to the falls.

When: Anytime. The flows are most spectacular in June when the Kootenai is swollen with spring runoff.

Bonus: Visit Libby Dam, just a few miles upstream from the falls. The controversial structure, completed in 1973, was built to control floods, provide irrigation water, and generate hydropower. By cutting off springtime flows that trigger spawning runs and blocking fish from reaching upstream spawning water, the dam may cause the federally endangered inland white sturgeon to disappear from Montana.

## 48 Catch an arctic grayling in the Big Hole River

Where: The Big Hole River from Wisdom to Jackson

When: The best fishing is July through October.

How: Grayling have tiny mouths. Use the same nymphs, dry flies, and spinners as for trout, only smaller.

Notes: Having evolved in the Arctic, where food is scarce, the grayling attacks prey with abandon and is an easy catch for anglers. Wrote Izaak Walton, "He will rise twenty times at a fly, if you miss him, and yet rise again."

Montana's Big Hole is the only river in the lower 48 states containing a (somewhat) healthy population of fluvial (stream-dwelling) arctic grayling. To truly appreciate this marvelous salmonid, you need to hold one in your hand and see its purple and emerald scales and sail-like dorsal fin. FWP is working with federal agencies and local landowners to keep this last bastion of river grayling from disappearing. Working against the fish, regularly proposed for federal endangered species listing, is increasingly warmer weather over the past decade. The hot temperatures result in low snowpack and increased competition with ranchers for water. In its favor are efforts by many of those same ranchers, working with biologists and hydrologists, to find ways to share the water so that both cows and grayling can thrive.

# 49 See the Giant Springs

Giant Springs State Park in Great Falls features one of the world's largest springs, gushing nearly 8 million gallons of icy water per hour. The water originates in the Little Belt Mountains 50 or more miles to the southeast. Snowmelt and rain taken in by exposed Madison Formation limestone in the Little Belts drain through underground fissures all the way to Great Falls. There the water gushes up from the spring and empties into the Missouri River. Adding to the site's oasis-like feel in this otherwise dry and dusty landscape is shade from towering cottonwoods, the park's lush, green lawns, and the sound of tumbling water. The massive spring was noted by Meriwether Lewis as the Corps of Discovery passed by in 1805.

Where: From I-15, take exit 280 into Great Falls. Stay on U.S. Highway 87/89 and follow signs to the park, which is on the city's northeastern side along the east bank of the Missouri River.

When: Open year-round, but to get the full oasis effect, visit in August.

Bonus: Giant Springs has enough flow to qualify as a river and is also known as the North Fork Roe River. *Guinness World Records* recognizes both the North Fork Roe and Oregon's D River as the world's shortest rivers.

# 50 Visit an ancient tipi ring

Some dating back 2,000 years or more, tipi rings are the sites where Plains Indians set up their portable, conical tents, made of buffalo hide and held up by thick lodgepoles. Rather than using wooden stakes, Indians anchored tipi edges to the ground with watermelon-sized rocks. When a camp moved, tents were dismantled and the rocks left behind. The result was tens of thousands of stone circles scattered across the Great Plains. Modern roads, towns, and farming have covered or removed some tipi rings, but many remain. The circular sites are found near water, in fertile valleys where game was abundant, or on rims of coulees and river valleys that provide expansive views of the landscape below.

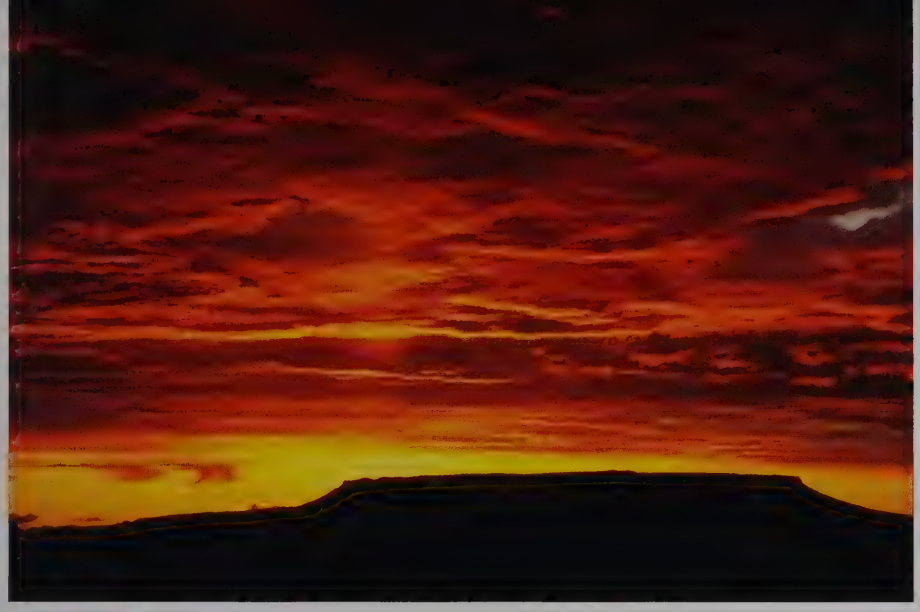
Where: Two sites where rings are accessible to public viewing are First Peoples Buffalo Jump State Park, southwest of Great Falls, and Madison Buffalo Jump State Park, about 10 miles southeast of Logan off I-90.

When: Anytime, but seeing the rings is easiest in spring when vegetation is sparse.

Note: Do not remove or move the rocks.

Bonus: When you find a ring, try to figure out why Indians positioned their tipis at that particular site.

TOP: JUSTIN OLTHOFF; LEFT: *HOME OF THE MOUNTAIN CROWS*, RICHARD THROSSEL, 1907, DENVER PUBLIC LIBRARY



## 51 Hike up Square Butte

Isolated hills with vertical sides and a flat top, buttes are classic features of the western landscape. Many are volcanic pillars (laccoliths), formed millions of years ago when magma swelled underneath the earth's surface and caused the overlying rock to bulge upward. A classic example is Square Butte, one of the most famous landmarks in central Montana. About 50 miles east of Great Falls near the town of Square Butte, the formation rises 2,500 feet from its base, towering over the valley and visible from 100 miles away. A National Natural Landmark managed by the Bureau of Land Management, Square Butte has steep sides near its summit that prevent livestock from reaching the top and overgrazing native vegetation. Hikers who reach the plateau will see grasses that in wet years grow waist high.

From atop Square Butte you can see the Highwood Mountains to the west, the Bears Paw Mountains to the north, and the Snowy and Little Belt Mountains to the southeast and southwest, respectively. Looking out over the surrounding landscape, you can also begin to comprehend the immensity of central Montana's vast open spaces.

Where: 30 miles southeast of Fort Benton off Montana Highway 80. Turn at the community of Square Butte and follow the signs. The site is accessible only through private land, requiring that you check in with the landowners before starting your hike.

When: Prairie wildflowers are most abundant in May and June, but blooms appear anytime from April through the end of September. The area is closed during fall big game hunting season from mid-October through late November.

Note: The hike to the top is about 1 mile, with steep going at the end.

Bonus: A band of mountain goats lives on top of Square Butte.

## 52 Spot a mountain lion track

Seeing a wild mountain lion in Montana is the sighting of a lifetime. One photographer we know, who spends an average of 175 days a year afield, tells us he has seen a cougar only once, and that was just the tail disappearing over a boulder. A lion track, on the other hand, is something almost anyone can find—if you know where and when to look. The best time of year is winter, right after a light snow. In early morning, drive up and down roads in national forests known to hold lions. Look for lion tracks—which are at least 3 inches tall by 3 inches wide—crossing the road. Learn to tell a lion track from a large dog or wolf track by doing a Google images search and comparing photos.

Where: Lions live throughout western and central Montana in forested mountains or foothills, though they also occur in the east along the Missouri River Breaks.

When: Winter is the best time of year to "cut" (come across) a track.

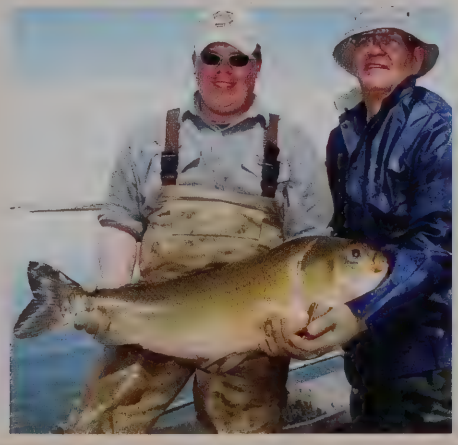
Bonus: The best way to find a track and spot a lion is to either hire or befriend a lion houndsman who will take you out to see a treed one.

## 53 Fish Nelson Reservoir

They ought to call it Lunker Lake, because more state record fish have been caught in this 4,000-acre prairie reservoir northeast of Malta than in any other. Bear in mind, the species caught in Nelson don't exactly trip off the tongues of most Montana anglers. State records over the years caught in Nelson include those for bigmouth buffalo, carp, goldeye, smallmouth buffalo, and white sucker—not exactly travel-brochure species. But for anglers who want to catch a diversity of big fish, and especially those after a state record, this fish factory merits attention.

Why so many lunkers? Located at the terminus of the entire Dodson South Canal system, Nelson is a nutrient sink. All that irrigation return water, high in organics and nutrients, ends up in the reservoir. And there the nutrients remain, growing mammoth fish year after year.

Nelson also produces substantial numbers of very large game species, including walleye, yellow perch, and northern pike.



Where: 26 miles northeast of Malta

When: Just after ice-out for northern pike, with June and July best for walleye and most other species. Winter fishing turns on during early and late ice, when fish are closer to shore and easier to locate.

How: Get the latest fishing report from Westside Sports in Malta at (406) 654-1611.

Camping: Stay a few days. Next to the reservoir is a 288-acre Bureau of Land Management campground with tent and trailer sites, drinking water, and restrooms.

Bonus: Nelson is especially popular with ice anglers who jig for walleye and with spearers looking to impale northern pike.

CLOCKWISE FROM TOP LEFT: STEVEN AKRE; NORTHERN JAGUAR PROJECT; ANDREW MCKEAN/FWP

# 54

## See the snow geese at Freezeout Lake

It's one of the world's great annual bird spectacles, comparable to the sandhill crane rendezvous in central Nebraska's Platte River and the pink flamingo concentration on Kenya's Lake Nakuru.

Each spring, snow geese migrate north from wintering grounds along the Gulf of Mexico to the Arctic. Along the way many stop at Freezeout Lake, a shallow basin along the Rocky Mountain Front 15 miles southeast of Choteau. Anywhere from 50,000 to 300,000 snow geese use the lake, leaving the safety of water twice a day to feed in surrounding fields of irrigated grain (the nearby town of Fairfield touts itself as "the malting barley capital of the world"). The birds usually leave the lake to feed at around 8 a.m. and again in late afternoon, returning to the water between 10 and 11 a.m. and then at sundown.

Don't be alarmed if at first you fail to see massive swarms of geese in flight as depicted in the photo above. Look for giant white "islands" in the lake, which are actually dense concentrations of geese. The birds also may be feeding in surrounding fields, several miles away. If no geese are flying, wait for them to get restless. When huge flocks rise from the water in alarm or to feed, they look, as one photographer said, "like a white mountain separating itself from the earth." The din is deafening.

Where: At Freezeout Wildlife Management Area, just off U.S. Highway 89, about 40 miles northwest of Great Falls. Interior roads are open to vehicles March 15 through late September.

When: Mid-March through early April. The lake also attracts large numbers of snow geese in November, but not nearly as many as in spring. Call the FWP regional office in Great Falls (406-454-5840) in March and April for an up-to-date snow goose report.

Bonus: You'll also see hundreds if not thousands of pintails and other ducks, as well as hundreds of tundra swans.

## 55 Visit Fort Peck Dam

Many significant dams have been built in Montana over the past century, but none changed the landscape and created recreational opportunities to the extent that Fort Peck has. Built from 1933 to 1940, the dam was the showpiece of President Franklin D. Roosevelt's Public Works Administration. Construction, which cost $2.5 billion in today's dollars, created thousands of jobs during the Great Depression. The 3.5-mile-wide dam was the biggest on earth when completed and even today is the world's second-largest earth-fill dam. Built primarily to reduce downstream flooding, provide water storage for irrigation, and produce hydropower, the dam created a reservoir of 245,000 surface acres with more miles of shoreline than the entire California coast. Fort Peck Lake (technically a reservoir) contains more fishing water than could be explored in many lifetimes. Among the species that anglers target are smallmouth bass, northern pike, landlocked chinook (king) salmon, crappie, channel catfish, and, notably, walleye.

Where: The dam is 10 miles southeast of Glasgow on Montana Highway 24. From there drive to the town of Fort Peck, which has a dam museum.

When: You can see the dam any time of year. Tours run during tourist season. The best time to fish the reservoir is May through September.

Bonus: Ivan Doig's novel *Bucking the Sun* is a fictionalized account of the Duff family, homesteaders driven from their Missouri River bottomland farm to work on Fort Peck Dam.

## 56 Pick a quart of huckleberries

Few outdoor activities are easier and more satisfying than spending a summer afternoon picking ripe hucks. The fruit is delicious fresh, made into jam, or cooked in desserts, and can be harvested by anyone of any age.

Huckleberries are most abundant in northwestern Montana forests between 3,500 and 7,000 feet. Look for conifer stands with roughly 50 percent tree cover. The berries ripen in open or semiopen areas of old burns, old clear-cuts, and avalanche chutes.

As you pick, put the berries in a 1-quart plastic container with a U-shaped flap cut in the lid. If you slip or stumble on the hillsides where many huckleberry bushes grow, you don't want your hard-earned bounty spilling all over the ground.

Keep in mind that humans aren't the only ones looking for huckleberries. Watch out for grizzlies, make noise, and carry bear pepper spray.

Where: Some of the best areas are in the Flathead and Kootenai National Forests.

When: Mid-July (at lower elevations) through September (at up to 7,000 feet)

How: View online pictures of huckleberry bushes, leaves, and berries so you know what to look for. Find huckleberries by driving along forest roads and stopping occasionally to seek out the low-growing bushes.

Bonus: If you can keep from eating your harvest before returning home, bake a pie or tart and serve with vanilla ice cream.

## 57 Learn to row a drift boat

The classic Montana trout river scene is two people in a drift boat, with one standing in the bow, casting, while the other sits with oars in hand, maneuvering past boulders to reach rising trout. The sun is shining, mayflies flutter in the air, and snowcapped peaks frame the background.

Put yourself in that picture by learning to row. This skill enables you to fish from a boat and cover much more water than by wading. It also allows you to position your partner's casts so they land just next to the bank, where trout often hang out.

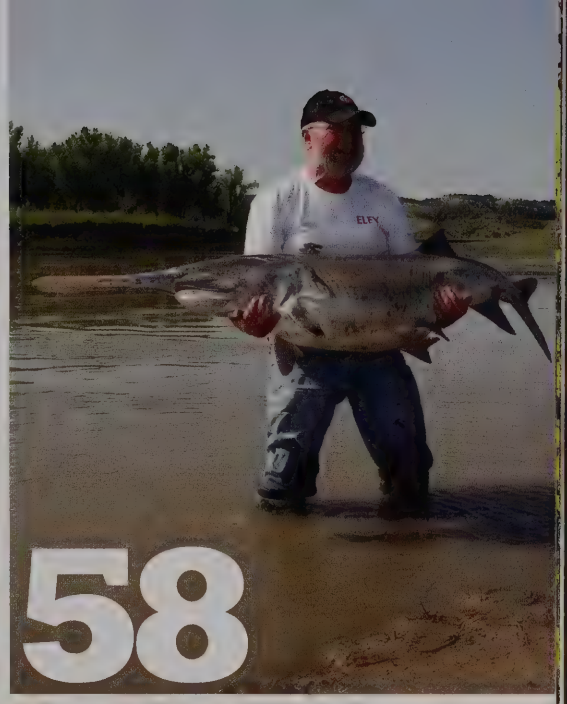
Though basic rowing is not especially difficult, it's not intuitive either. When rowing with the current, the rower sits in the middle, facing the bow, which points downstream. The boat floats with the current until it must be slowed or steered around boulders or other obstacles. This is done with backstroking. By pulling the oar handles back toward your chest, you push the oar blades forward in the water, slowing the craft. By backstroking just one oar or the other, you can pivot the craft left or right; occasional backstroking with both oars counteracts the push of the current and lessens forward movement.

Instructions like these are of little help until you actually get on the water with an experienced oarsman or oarswoman and learn for yourself.

Where: If you don't have a friend with a boat, hire a fishing guide. In half a day he or she will have you rowing like a pro.

When: Begin on slow, open rivers like the Missouri or Bighorn. After building confidence and skill, move to more challenging waters like the upper Yellowstone or Big Hole.

Bonus: Once you become proficient, consider buying your own boat. You will suddenly become very popular with fellow anglers.



## 58 Snag a paddlefish

This prehistoric fish has lived in North America since the time of the dinosaurs. Then, as now, its most outstanding feature is its long, paddle-shaped rostrum, or snout. This flat appendage—as well as the head and gill flaps—contains special sensors the fish uses to locate electrical currents emitted by schools of zooplankton. A paddlefish swims into a mass of these microorganisms with its beach ball–sized mouth wide open, straining the tiny creatures through comblike rakers in the gills.

Because paddlefish don't eat worms and other bait, people can catch them only by casting out large treble hooks, snagging the massive fish, and then horsing them to shore with rods as thick as pool cues. Fly-fishing is not an option.

Most of the fish's meat is white, dense, and delicious, similar to sturgeon or Atlantic Ocean monkfish. It's especially flavorful when smoked.

A female paddlefish produces prodigious amounts of eggs, which experts can make into caviar. Much snagging takes place at Intake Dam downstream from Glendive. In exchange for having their paddlefish cleaned, butchered, and packaged, snaggers donate roe to a commercial caviar operation. A portion of the proceeds goes to the city of Glendive to fund historical, cultural, and recreational projects.

FWP biologists monitor paddlefish populations and harvest, adjusting regulations when necessary to ensure a sustainable wild fishery.

Where: Paddlefish swim in the Yellowstone River upstream to around the Tongue River confluence and in the Missouri River upstream to about Fort Benton.

When: Spring, summer, and fall

How: Paddlefish snagging requires a conservation license, fishing license, and paddlefish tag. The limit is one paddlefish per person each season. See the Montana Fishing Regulations for other laws related to paddlefish snagging and harvest.

Bonus: Purchase a jar of Yellowstone caviar, the preserved roe of paddlefish, from online sources. The delicacy costs—*gulp*—$30 to $50 an ounce, plus shipping.

## 59 "Play" the Ringing Rocks

Parts of this granite boulder outcrop between Butte and Whitehall actually chime when struck lightly with a hammer. Geologists believe the ringing is a combination of the rocks' individual composition and the way they have joined together over time.

A boulder removed from the pile does not ring when struck. Also, the sound differs depending on where on the pile a rock is struck. Those on top sound like bells, while those at the bottom sound like someone tapping a pipe. You may need to tap several rocks before finding one that is particularly musical.

**Where:** Drive east from Butte 18 miles to the Pipestone exit (241). Cross the freeway then follow the gravel road along the freeway east for three-quarters of a mile. Follow the road north over the railroad tracks for 3 miles and look for Bureau of Land Management signs indicating the Ringing Rocks. It's a good idea to drive with a high-clearance vehicle, as the road is rocky.

**When:** Late spring, summer, and early fall

**How:** Bring a hammer for each person in your group.

**Bonus:** Pennsylvania's Ringing Rocks Park is the only similar site in the United States. Two other areas of rocks with similar sonorous properties are the Musical Stones of Skiddaw in England and the Bell Rock Range of western Australia.

## 60 Bike the Hiawatha Trail

Though Montana offers only a few rails-to-trails bike routes, this one, shared with Idaho near where I-90 crosses the state line, is among the nation's best. Not only is the scenery splendid, but riders also pass through nine railroad tunnels, including one 1.6 miles long, and cross seven high trestles. The 15-mile route (one way) also snakes through the epicenter of the historic 1910 fire, which shaped the landscape and wildlife of western Montana during the past century. Forty-six interpretive signs along the abandoned railroad bed tell the story of the Big Burn and how local residents escaped the conflagration in railcars.

The Big Burn, along with another 1,700 fires sparked across the country in 1910, so unnerved the American public that Congress demanded total fire suppression from the fledgling U.S. Forest Service. Ironically, the result over the past century has been to make forests more flammable, as dead and downed trees, which periodic wildfires historically cleaned out, built up to fuel catastrophic blazes. You'll gain a sense of the fire potential while biking the trail.

**Where:** Taft exit 5, just east of where I-90 crosses the Montana-Idaho border

**When:** The trail opens in late May.

**How:** The logistics of the trail are a bit confusing. You need to buy a ticket at Lookout Pass Ski & Recreation Area, which is 5 miles from the trailhead. Visit ridethehiawatha.com for clear instructions on where to go and what to do. Be sure to bring a jacket, hat, and, especially, headlamp (for the pitch-dark tunnels).

**Bonus:** From the East Portal Trailhead, the 15-mile-long trail is a gentle 2 percent downhill grade. Pay for a shuttle back to the parking lot, or cycle back to burn a few more calories and see the sights from a new perspective.

## 61 Hunt upland birds over a pointing dog

Tens of thousands of residents and nonresidents spend winter, spring, and summer waiting for bird season, when they can return to Montana's prairie and hunt upland species behind an English setter, Brittany, German wirehair, griffon, or other pointing breed.

Pointers are trained to follow bird scent and then, when near their prey, stop, raise a front paw, and aim their muzzle at the target. The bird freezes, hoping it hasn't been seen. And this is the beauty of pointing breeds. Rather than having to sprint to catch a Lab, springer, or other flushing breed that chases after the bird with intent to catch it, you can walk (though briskly) toward the point. There is time to pause and collect yourself before moving in ahead of your dog and flushing the bird. Which, ideally, you then proceed to drop with a single shot. It's about as gentlemanly as hunting can get.

**Where:** Most upland bird hunting with pointing dogs occurs in central and eastern Montana, though pointing breeds are also used for ruffed and dusky (blue) grouse in the state's western mountains.

**When:** Hun and grouse seasons open September 1 and end January 1 (except sage-grouse, which closes November 1). Pheasant season opens in mid-October and ends January 1.

**How:** Find someone who owns a pointing breed and get yourself invited on a hunt. Learn shotgun shooting and dog handling basics from the Becoming an Outdoors-Woman Program: fwp.mt.gov/education/bow.

**Bonus:** The only thing upland bird hunters love more than hunting is arguing over whose breed or dog is better. Join the debate.

## 62 See a long-billed curlew

This unmistakable prairie bird is the only species possessing such an improbably long, downward-curving bill. Though technically a shorebird, the long-billed curlew nests in Montana's northern prairies, using its slate-gray, 5- to 8-inch-long bill to pull earthworms from moist ground. On its wintering grounds along the Baja California and Gulf Coasts, the curlew probes deep into wet sand for shrimp and small crabs.

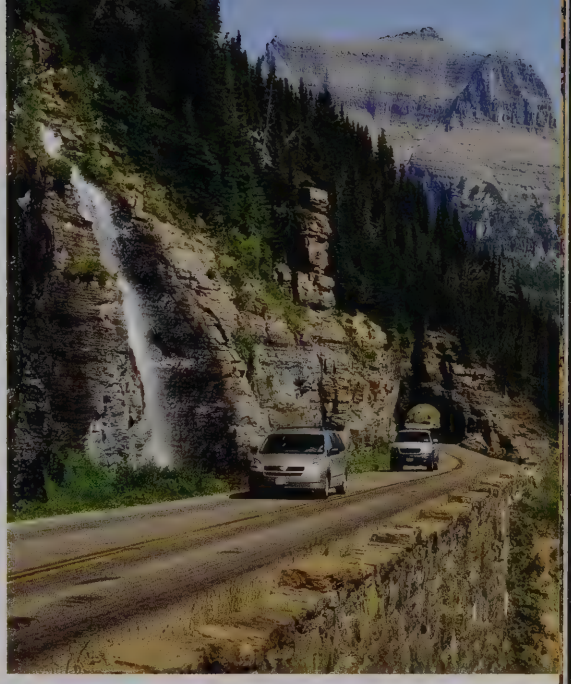
The bird has a buff-colored body with mottled coloration. It is sometimes mistaken for a marbled godwit, which is similarly shaped and also equipped with a long bill. But the curlew, the world's largest shorebird, is much taller (23 inches compared to 18 inches), and its bill curves down, while the godwit's is straight or slightly upward tilting.

**Where:** Wet areas of central Montana grasslands, especially between the Rocky Mountain Front and the CMR National Wildlife Refuge

**When:** The best viewing is in May during mating season.

**How:** First, visit the Cornell Lab of Ornithology website (birds.cornell.edu) and listen to the various curlew calls. Then drive through short- or mixed-grass prairie in spring or summer and listen for the calls before scanning the source area with binoculars.

**Bonus:** The long-billed curlew is also known as the candlestick bird. Candlestick Point in San Francisco is named after the bird. Candlestick Park Stadium inherited the name.



## 63 Take the Going-to-the-Sun Road drive

Perhaps nowhere in the world can you see so much spectacular scenery without leaving your vehicle. Running from West Glacier to St. Mary, the 50-mile-long Going-to-the-Sun Road is the only route through Glacier National Park. Along the way the scenic roadway hugs the Garden Wall, a sharp-edged ridge carved by glaciers, and kisses the Weeping Wall, where springs fed by melting snow cascade down a steep, dark embarkment onto passing vehicles. The drive to the top also weaves past pullouts overlooking vast valleys below while climbing more than 3,000 feet to summit at Logan Pass on the Continental Divide.

The pass is a great spot to see mountain goats, pikas, hoary marmots, and wild sheep. Sightings of distant grizzlies are not uncommon.

The road's breathtaking scenery is matched only by the engineering audacity that went into building it. More than half the road, completed in 1932, was carved by hand out of solid rock using pickaxes and dynamite. A ten-year multimillion-dollar construction project to repair deteriorating portions of the 81-year-old road is not quite finished. Though the road remains open, expect periodic delays caused by repair crews working on the narrow route.

**Where:** Glacier National Park between West Glacier and St. Mary

**When:** Due to deep snow, the road usually doesn't open until mid-June and closes in late September.

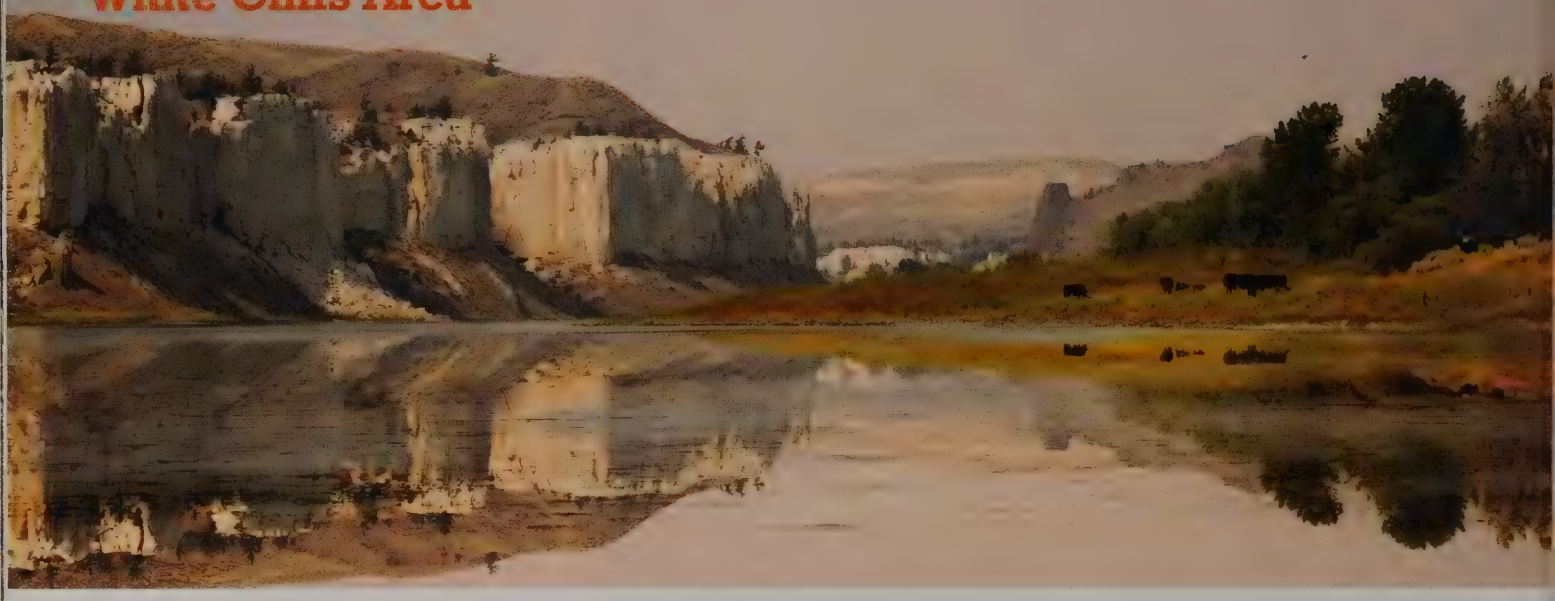
**Note:** If the parking lot at Logan Pass is full, park at the pullout below (east of) the pass and hike up the road.

**Bonus 1:** Avoid driving off a cliff while gawking at waterfalls—and help reduce traffic to boot—by taking the park's wonderfully restored propane-propelled red buses. The ride includes colorful narration by the drivers. Or park at one of the many lower-elevation shuttle stops and take a free shuttle bus to and from Logan Pass.

**Bonus 2:** To see how winter socks in the park each year and the tons of snow that has to be removed from the road every May and June to facilitate travel, do a Google images search for "Snow Removal Sun Road."

CLOCKWISE FROM TOP LEFT: SHUTTERSTOCK; CHUCK HANEY; DONALD M. JONES; DONNIE SEXTON; GARY KRAMER

# 64 Float the Missouri River White Cliffs Area



The White Cliffs of the Missouri River float was a favorite getaway of the late Helena resident and *Undaunted Courage* author Stephen Ambrose. "It is today as Lewis saw it," Ambrose wrote in his sweeping story of the Corps of Discovery's famous journey. "The White Cliffs can be seen only from a small boat or canoe. Put in at Fort Benton and take out three or four days later at Judith Landing. Of all the historic and/or scenic sights we have visited in the world, this is number one. We have made the trip ten times."

Designated a National Wild and Scenic River in 1976, this 149-mile stretch of water and surrounding 130,000 acres of land remain largely unchanged from when the Corps of Discovery's crew members hauled their canoes and pirogues through the area in 1805. Locally known as the Breaks or Badlands, the highly eroded landscape cuts through miles of prairie before dropping precipitously at the river's edge.

The area's centerpiece is the White Cliffs, which Meriwether Lewis described as having "a most romantic appearance." Escarpments of white limestone and dikes of volcanic rock rise from the shoreline; eroded rock pillars resemble ancient city ruins, with towers, fortifications, and spires. It's not uncommon for boaters to run aground while gawking at the remarkable geological marvels.

Where: Most trips begin at the tiny burg of Virgelle, about 50 miles northeast of Great Falls, and end at Judith Landing, the halfway point through the Wild and Scenic River stretch and next to the bridge where Route 236 crosses the Missouri, 55 miles south of Havre as the crow flies.

When: Mid-May to late September. The first and last few weeks of the floating season require warm clothing in case of harsh weather.

How: Float trips can be taken on your own or with an outfitter. Either way you'll need a shuttle back to the put-in after the three- to four-day float. Find outfitters in Loma and Fort Benton.

Bonus: Bring a fishing rod and try to catch some of the river's channel catfish, shovelnose sturgeon, freshwater drum, and other species. The fish generally hang out in eddies.

# 65 Fish the Mother's Day caddis hatch

The Mother's Day caddis, also known as *Brachycentrus* and *Grannom*, is a relatively large (sizes 16 to 14), dark insect that produces one of the year's first big hatches on many Montana rivers. The hatch takes place once water temperatures reach 50 to 53 degrees (depending on the river) and stay there for a few days. Because mid-May is such a variable time of year, with river flow, temperature, and water clarity changing daily, the hatch is notoriously hard to predict. Mother's Day is a good bet for the peak time but not a guarantee.

Where: The Big Hole, Yellowstone (from Emigrant to Big Timber), and lower Madison are regarded as the top rivers for the Mother's Day caddis hatch, but tributaries and other local rivers also see hatches around the same time.

When: As mentioned above, action starts when water temperatures reach a certain level and stay that way. Starting May 1, call local fly shops or check their websites for the latest news. The best dry action will usually be from midmorning to early afternoon. Fish caddis pupae imitations under the surface at other times.

How: It depends on what stage the hatch is in. During the morning, larval and pupal patterns are best for nymphing with strike indicators. Two standbys are the Prince Nymph and the Deep Sparkle Pupa. When fish start rising, try any number of dark caddis flies with a pupa pattern as a dropper. Ask at local shops for the best flies on nearby waters.

Bonus: The peak of the hatch can actually be the worst fishing. The fish consume so many naturals they become full and stop eating. Also, finding your fly among the zillions of naturals on the water can be nearly impossible for you or a trout. Often the best fishing occurs on days of a decent but not phenomenal hatch.

## 66 See wild sheep at Koo-Koo-Sint Viewing Site

Each year from late fall to spring, bighorn sheep gather near this small pullout about 10 miles east of Thompson Falls. The animals are escaping deep snow on the surrounding Koo-Koo-Sint Ridge and feeding on vegetation along the mountain foothills down to the highway.

Koo-Koo-Sint—"Man Who Looks at Stars"—was the name given to Canadian explorer, surveyor, cartographer, and naturalist David Thompson by local Flathead Indians. Thompson, the first white to survey this region, is to northwestern Montana what Lewis and Clark are to the rest of the state. In 1808 Thompson and his men descended the Kootenai River from Canada into what is now Montana and Idaho. The following year, near today's Thompson Falls, the explorer built Saleesh House (later called Flathead House), the first Montana trading post west of the Rockies.

A monument to Thompson and the site of Saleesh House (the structure no longer exists) are near the wild sheep viewing site.

Where: 15 miles east of Thompson Falls on Montana Highway 200

When: Late November and December, and March through May, when the sheep are at lower elevations eating new grass

Warning: Too often, bighorns here are killed by vehicles. Slow down and watch the road carefully for signs of wild sheep.

Bonus: It's challenging to distinguish adult females from young males, because their horns are nearly identical in size. Ewes often have lambs nearby trying to nurse. Also, watch the sheep urinate. Males lean a bit forward, while females squat slightly.

## 67 Catch a Columbia River interior redband trout

Almost all rainbow trout in Montana are descendants of coastal rainbows from California hatcheries stocked here as early as the 1880s. Montana is home to only a single native rainbow trout species, the Columbia River interior redband. This fish is native to the Kootenai River and its tributaries upstream to the Fisher River, a few miles from Libby Dam.

After California rainbows were stocked in Montana streams containing redbands, the two rainbow subspecies hybridized, making genetically pure natives increasingly rare. Today genetically undiluted stocks of redbands exist only in the upper reaches of creeks where drainage culverts, small waterfalls, or other barriers have prevented hatchery rainbows from moving upstream.

A variation of the redband trout is the steelhead, which moves from the Pacific Ocean up the Columbia River into Idaho's Snake River Basin and British Columbia's Fraser River system.

Where: Upper reaches of tributaries of the Fisher River, which flows north and meets the Kootenai River just below Libby Dam

When: The best fishing for redband trout, as with all rainbows, is in midsummer.

Bonus: Each spring a large, lake-dwelling strain of the redband trout known as the Gerard rainbow swims upstream (north) from Kootenay Lake in British Columbia to the Lardeau River to spawn. Thousands of years ago, some Gerards may have also migrated south through the Idaho Panhandle into Montana to spawn in the Kootenai River and its tributaries. Over time, some of those fish may have remained and formed our state's resident redband trout populations.

# 68 Go elk hunting

For tens of thousands of resident and nonresident elk hunters, nothing signifies Montana better than its ample opportunities to pursue these grand animals. Elk hunting requires physical strength and stamina, woodsmanship skills, and the ability to navigate remote backcountry areas. This is not something you do on a whim. It requires research, scouting, and spending long hours in the forest. But the 100,000 hunters who pursue elk here each fall say the potential payoff is well worth the effort.

**Where:** Most elk in Montana live west of a line from Glacier National Park to Yellowstone National Park, and most of those occur in the state's southwestern region. Elk are found on several million acres of national forests open to public hunting, though increasing numbers are finding refuge on private property.

**When:** Various elk seasons run from early September (archery) through late November (firearms).

**How:** If you've never hunted elk before, the best place to start is FWP's free publication, "Welcome to Montana Elk Hunting," available at fwp.mt.gov or any department office. An easier but more expensive option is to hire an outfitter (montanaoutfitters.org).

**Bonus:** Don't become obsessed with trying to kill a massive bull like the one shown here or on covers of hunting magazines. Those big males are extremely difficult to find, much less kill—especially for someone just starting out. Most hunters' first elk is a cow, and they are plenty thrilled achieving that.

## 69 See sage-grouse and sharp-tailed grouse on their spring mating grounds

Sage-grouse and sharp-tailed grouse are closely related prairie birds that conduct their mating rituals in early spring. Just before sunup, males and females fly from surrounding lands to open areas known as leks. There, the males strut or dance to lure females for mating.

After the male **sage-grouse** spreads the feathers of his spiky tail, he inflates then rapidly deflates large air sacs on his chest to make a liquid gurgling sound—*poik, poik, poik*—known as booming. Some say the sound resembles the soft pop of distant balloons.

The male **sharptail** keeps his tail tightly bound but puffs out the white feathers at the base. He bends forward and holds his wings straight out parallel to the ground while stomping his feet rapidly in staccato fashion, like the keys of a typewriter, a behavior known as dancing.

Where: Sage-grouse: eastern Montana in and around the CMR National Wildlife Refuge, in sagebrush flats in the state's southeast, and in Beaverhead and Madison Counties in the southwest. Sharptails: central and eastern Montana, especially north of the Hi-Line.

When: March and April. Reach leks before sunup and settle down quietly to avoid spooking the birds.

How: Call an FWP or BLM office in sharptail or sage-grouse range and ask the area biologist for advice on where to find leks. Let him or her know you understand that human presence can disrupt mating and that you are open to advice on ways to reduce possible disturbance.

Note: Getting too close and scaring the birds from a lek disrupts mating activities. Stay at least 100 yards away and use binoculars or a spotting scope for a closer look.

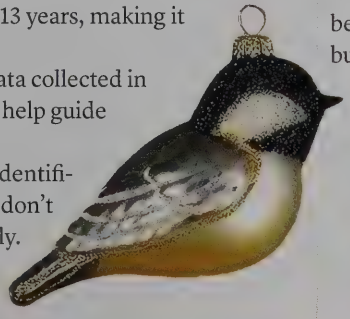
Bonus: If you see the birds fly off in a hurry, look skyward. They might have spotted a golden eagle or other raptor overhead. Wait a few minutes. The birds will likely return after the predator flies off.

## 70 Join the annual Audubon Christmas Bird Count

Every year from mid-December through early January, hundreds of Montana volunteers across the state head outside for one day to count as many different birds and bird species as they can within a 15-mile radius. This ritual, the annual Audubon Christmas Bird Count (CBC), has been going on in Montana for 104 years and nationwide for 113 years, making it the world's longest-running citizen science wildlife census.

The National Audubon Society and other organizations use data collected in the long-term census to assess the health of bird populations and help guide conservation action.

The CBC is a great way to meet fellow birders, improve bird identification skills, and spend time in prime bird-watching sites. You don't need birding expertise to take part, just a willingness to look closely.

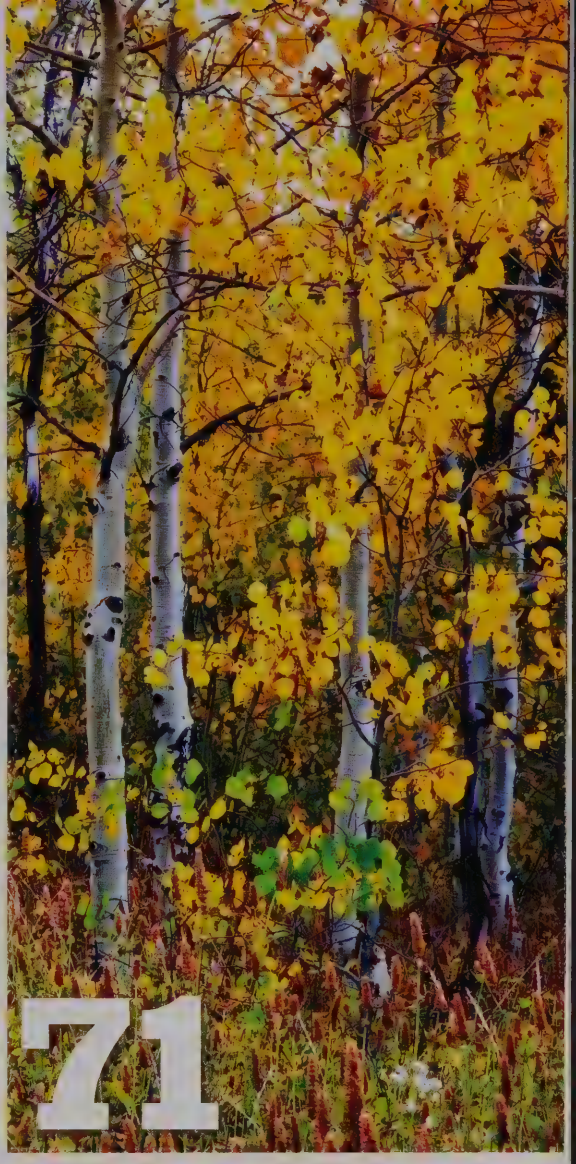


Where: The counts are conducted throughout Montana at roughly 30 different sites.

When: December 14 through January 5

How: Learn more by visiting the Montana Audubon CBC website page at mtaudubon.org/birds/cbc.

Bonus: The record for most species (90) recorded during a Montana CBC was set in the Bigfork area in 2011.



## 71 See quaking aspen in fall

For a short time each fall, stands of quaking aspen that just a few weeks earlier blended into surrounding conifer forests suddenly light up. As daylight shortens, the green chlorophyll in their leaves disappears. That reveals the yellow color existing there all along but masked by the chlorophyll. The water-loving aspen, often found in ravines that catch extra precipitation, brighten the dark green mountainsides with streaks of glorious yellow and gold. Then, with the first few hard frosts and strong winds, the leaves drop and the mountainsides look much like they did before, leaving you to wonder: Was that wild burst of shimmering yellow just a dream?

Where: Quaking aspen are generally found in small, scattered groves west of the Continental Divide, but large woodlands exist along the Rocky Mountain Front, especially on the eastern border of Glacier National Park. Aspen are sometimes visible from afar in late spring and summer, when their leaves take on a bright green or silvery sheen, making thickets stand out slightly against the darker green of surrounding pines and firs.

When: Aspen reach their full fall glory between late September in northwestern Montana and mid-October in the state's southwestern region.

Bonus: Because quaking aspen are food for many species and grow in moist areas containing other vegetation, they are great places to find wildlife, especially moose and ruffed grouse.

# 72 Tie a fly

In a state so rich in fly-tying tradition, every fly angler needs to sit down at a table at least once and fabricate a few artificial aquatic insects. Montanans are known for their fly-tying expertise and innovation—from Dan Bailey's world-renowned mail-order shop (above) in Livingston (for years the largest manufacturer of artificial flies in the United States, producing up to 750,000 flies annually), to George Grant's woven-hair flies and Al Troth's Elk Hair Caddis, to the popular Sparkle Dun, X-Caddis, and other patterns created by Craig Mathews of West Yellowstone. And that's just scratching the surface.

Tying a fly can be easy or hard, depending on your manual dexterity, the quality of instruction, and, especially, the pattern itself. With practice, easy-to-tie flies like the Pheasant Tail Nymph, Hare's Ear Nymph, and various caddis and midge pupae can be tied in just a few minutes. Others, such as Stimulators, Royal Wulffs, stonefly nymphs, various Muddlers, and any dry fly with a grizzly hackle wing, can have you hunched over a vise for hours trying to get it right—and convince you that paying $2.95 for a fly isn't so outrageous after all.

Even more satisfying than tying a fly is catching a fish with it.

Where: It's nearly impossible to learn fly tying from a book or YouTube video. Take a class at a nearby fly shop.

Cost: You can get started tying flies for less than $100. Basic gear includes a vise, sewing scissors, bobbin, bodkin, various threads, and materials for the flies. There's no need for costly hackle capes, hair stackers, or whip finishers unless you want to expand your repertoire.

Bonus: If you learn to tie just one fly, make it the Elk Hair Caddis. It's easy to do, deadly on trout, and pays tribute to one of the state's great fly tiers, Al Troth, who passed away in 2012.

# 73 Walk under the Roosevelt Arch at Yellowstone National Park

Montanans don't like to admit it, but only about 5 percent of Yellowstone National Park is actually in the Treasure State. The rest, except a sliver in Idaho, lies in Wyoming.

Still, one of the park's most iconic monuments sits within Montana: the Roosevelt Arch just outside Gardiner. The five-story-tall structure was built in 1903 as the park's northern entrance. The idea was to give the wild, open landscape a visible gateway for visitors coming from the Northern Pacific Railway's newly built Reamer railroad depot, the disembarkment point for train travelers arriving from Livingston. (The railway was built along the Yellowstone River's west bank, opposite today's U.S. Highway 89, which, from Yankee Jim Canyon to Gardiner, runs along the east bank). This imposing stone monument, dedicated by President Theodore Roosevelt, stands a half mile out of town and several hundred yards from the modern entrance. An inscription at the top reads "For the Benefit and Enjoyment of the People."

Where: After entering Gardiner on U.S. Highway 89, cross the bridge over the Yellowstone River, turn right (seemingly away from the park), and follow a horseshoe turn that takes you through the arch. Watch out for tourists who at all times of year take photographs of each other standing beneath or next to the stone structure.

When: Year-round. The arch is lit up every evening.

Bonus: Imagine President Roosevelt giving a speech to roughly 2,000 attendees of the grand opening in 1903: "The Yellowstone Park is something absolutely unique in the world," he said. "This park was created and is now administered for the benefit and enjoyment of the people...it is the property of Uncle Sam and therefore of us all."

# 74 See (and hear) a prairie rattlesnake

We're not saying anyone should go near these potentially dangerous reptiles. But rattlesnakes are a constant presence in much of Montana's outdoors, and it's part of that experience to at least once see one from a distance or hear the buzz of its rattle.

Also known as the western rattlesnake, the prairie rattler is found in open, arid country and ponderosa pine savannahs. It often dens on slopes in areas with rock outcrops.

Rattlesnake bites are extremely rare and deaths even rarer. Of the hundreds of thousands of hunters, hikers, and backpackers traversing Montana each year, only half a dozen or so report being bitten, according to the Rocky Mountain Poison and Drug Center in Denver.

Rattlesnakes are shy. If left alone, they won't bother people. But if one thinks it will be stepped on or otherwise harmed, it may strike. If bitten, seek professional medical care as soon as possible (but don't run, to maintain a slow heartbeat).

Stay safe in rattler country by wearing leather boots and keeping your hands away from rocky ledges, wood piles, brush, or other places that snakes frequent.

Where: Prairie rattlesnakes live in open, arid areas throughout Montana, especially rocky slopes.

When: You'll most likely see or hear rattlesnakes from mid-summer through September. In winter the snakes gather in large groups in rocky dens, and in early spring and late fall the cold-blooded reptiles are lethargic.

Bonus: Bull snakes, whose bite contains no venom, are often mistaken for rattlesnakes. These large snakes hiss and thrash their tails in dry grass, mimicking the rattlesnake's rattle.

## 75 Hike a prairie in June

This is one of the easiest yet most stimulating outdoor activities Montana has to offer. Simply drive to a prairie grassland, park your vehicle, and start walking. Look down at wildflowers and grasses, and look up to see raptors, pronghorn, and the endless horizon. Listen for birds. Bring a picnic, eat, and then take a nap, just as folks did there on Sunday afternoons a hundred or even a thousand years ago.

Where: Shortgrass and mixed-grass prairie is found throughout southwestern, central, and eastern Montana. Most public prairie lands are owned by the Bureau of Land Management and are indicated on BLM maps, available at sporting goods stores.

When: The best time to hear songbirds is May, to look at wildflowers is June, and to see grasses in their autumn hues is October.

How: Drive, park, and then start walking.

Bonus 1: Stick around until dusk. Nothing compares to a prairie sunset, where you can see the earth's arc along the vast horizon.

Bonus 2: Take your prairie outing a step further by bringing along a sleeping bag and pad and spending the night under the stars. You'll feel like a cowboy from a Zane Grey novel.

## 76 Catch a westslope cutthroat trout

The colorful westslope cutthroat, known years ago as the blackspotted cutthroat, doesn't grow as large or fight as hard as its cousin the closely related rainbow. But the cutthroat eagerly takes dry flies, making it especially popular when rainbows or the more finicky browns aren't biting. What's more, the westslope cutthroat is a native species (and Montana's state fish), which adds to its appeal. The species is identified by bright orange-red slash markings on both sides of the lower jaw (though the identification is not definitive, as most rainbow-cutthroat hybrids also exhibit the orange-red slashes).

Where: Westslope cutts swim in mountain streams in western Montana both east and west of the Continental Divide. Because the species has been displaced and hybridized by rainbows, pure populations are increasingly difficult to find. Top cutthroat streams include the upper Bitterroot, Big Hole, Blackfoot, Rock Creek, and the South, Middle, and North Forks of the Flathead.

When: The best fishing is generally in midsummer.

Bonus: Montana's other cutthroat species, the Yellowstone cutthroat, swims in the upper Yellowstone, Boulder, and Shields Rivers and their tributaries. The two species are difficult to tell apart. But because they don't swim in the same streams, you can usually tell which is which by the waters where you are fishing.

## 77 Explore Lewis and Clark Caverns

Most school kids take a field trip to this million-year-old limestone labyrinth, one of the largest caverns in the United States. But if you're new to Montana or haven't visited this state park lately, you owe it to yourself to see these spectacular caves lined with stalactites, stalagmites, columns, and helictites. A new lighting system illuminates the colorful, otherworldly formations and shapes created by mineral-laden water dripping and seeping from tall ceilings. A state parks guide leads all the tours.

**Where:** 19 miles west of Three Forks on Montana Highway 2 or 17 miles east of Whitehall on Montana Highway 2

**When:** May 1 through September 30, with special candlelight tours offered during the winter holiday season.

**Bonus 1:** Townsend's big-eared bats make the caverns their home. The caverns hold Montana's largest colony of these rare flying mammals.

**Bonus 2:** Lewis and Clark made their way up the Jefferson River just below the caverns, but were unaware of the cave's existence and did not stop.

## 78 Fish a lazy warmwater river

Western Montana's trout streams receive so much attention you'd think the state's central and eastern regions were fishless. In fact these areas are laced with waters filled with channel catfish, freshwater drum, sauger, shovelnose sturgeon, walleye, smallmouth bass, and other species that are fun to catch, delicious, or both. One of the great things about fishing a warmwater river is that it's not nearly as much work as fly-fishing for trout. All you need is a lawn chair, a spot along the bank, a spinning rod and reel, and a carton of night crawlers. Cast to an eddy or other break in the current and let your bait drift down to the fish. Wait for the line to twitch. Give the fish a few feet of slack to take the bait, then set the hook. Is it a 2-pound sauger? A 20-pound channel cat? Fishing these fertile, fish-filled rivers, you never know.

**Where:** Throughout central and western Montana. Some of the better-known fishing waters are the Marias, lower Missouri, Musselshell, Milk, lower Bighorn, Tongue, Powder, and lower Yellowstone Rivers.

**When:** May through September

**Bonus:** Pack a propane stove, frying pan, seasoned fillet dip, vegetable oil, and paper towels and have yourself a riverside fish fry.

## 79 Take the CMR National Wildlife Refuge auto tour

An easy and fun way to experience the wide-open prairie is to visit the Charles M. Russell National Wildlife Refuge, which starts at Fort Peck Dam and extends west along both sides of the reservoir and the Missouri River for 125 miles. The refuge is named for the famous western artist who painted the region's prairie landscapes, rugged cowboy life, and diverse wildlife.

Called the "CMR," this vast refuge is known for its trophy bighorn sheep and elk hunting. Wildlife watchers look for big game, dozens of prairie songbird species, and two of the state's rarest carnivores: the swift fox and the black-footed ferret.

See the refuge via a self-guided two- to three-hour auto tour route, reached from two points along U.S. Highway 191 between Malta and Lewistown. Interpretive stops along the 19-mile route provide information on the wildlife, geology, and history of the vast landscape. The auto tour includes the Slippery Ann Elk Viewing Area, where, each September and October, hundreds of bulls, cows, and calves gather at a 1,500-acre no-hunting zone along the river bottom. The viewing is best during mid- to late September, when rutting bull elk numbers peak.

Where: The auto route starts off U.S. Highway 191 between Malta and Lewistown about 2 miles north of the Fred Robinson Bridge.

When: The refuge is open year-round, but travel on the auto route is best from May through October. Mid-September to early October is the best time for viewing elk at the Slippery Ann area.

Bonus: Wildlife watchers have their best chance of spotting bighorn sheep by hiking on Mickey and Brandon Buttes. In April, look for sage-grouse on mating leks. On summer nights, using a spotlight, look for reintroduced black-footed ferrets hunting prairie dogs at nearby UL Bend NWR, 55 miles south of Malta and within the boundaries of the CMR.

## 80 See a greater short-horned lizard

If ever an animal represented Montana's dry, open desert landscapes, it's this squat-bodied creature. Greater short-horned lizards have a widespread range throughout the arid central and eastern parts of the state, from the Rocky Mountain Front to the North Dakota border. But being small, still, and colored like the rocky ground they inhabit, they are tough to spot.

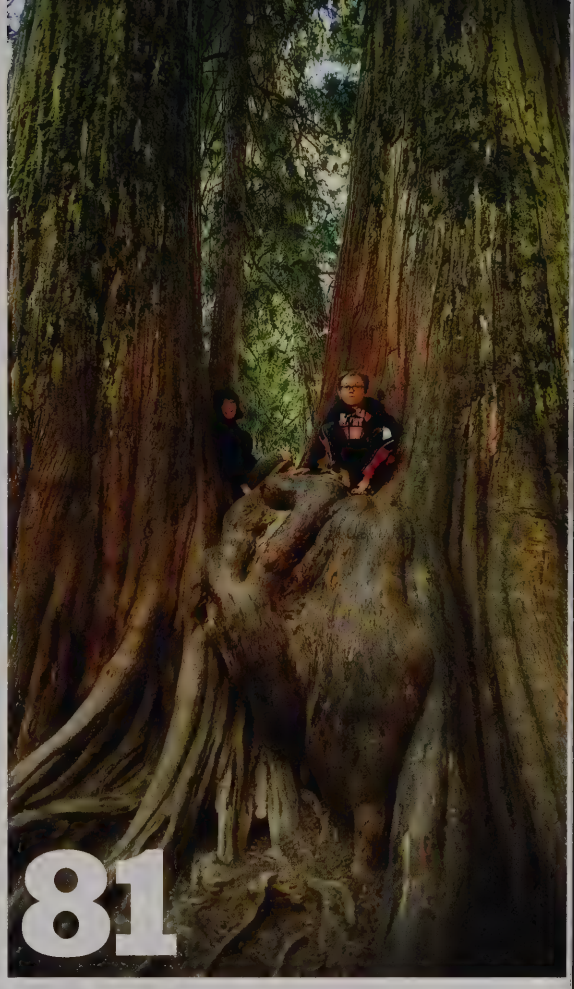
Though also called horned toad or horny toad, the greater short-horned lizard is not a toad (amphibian) but a lizard (reptile). The confusion is understandable because of the lizard's broad toad-like shape. The greater short-horned lizard is roughly 3 inches long with an oval, flattened body, a heart-shaped head (when viewed from above), a single row of light-colored scales along its sides, and small, hornlike projections near the back of its head.

Where: Dry, open areas east of the Rocky Mountain Front, the bleaker the better

When: June through October

How: These perfectly camouflaged lizards are nearly impossible to see unless they move, when they look like a rock with legs. Find a naturalist in eastern or central Montana and ask if he or she knows of any greater short-horned lizard hotspots.

Bonus: When spotted by a predator at close range, the lizard often responds by opening its mouth or performing "push-ups" from all four legs. It also inflates its lungs to puff up and enlarge its appearance.



## 81 Visit the Ross Creek cedars

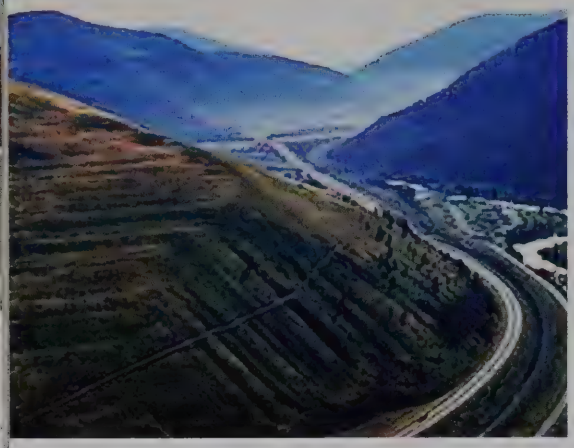
One of the best examples of Montana's inland rainforest (known to scientists as mesic montaine mixed-conifer forest) is the grove of giant cedars at the Ross Creek Scenic Area, part of the Kootenai National Forest. The 100-acre site is home to a grove of enormous western red cedars, some up to 12 feet in diameter and 175 feet tall. Staring up at the ancient trees, a few more than 1,000 years old, you'd swear you were deep within Washington's Olympic Peninsula.

A flat, graveled 1-mile loop trail that is handicapped accessible takes visitors through the main grove. The nearby 4.5-mile Ross Creek Trail 142 makes for a great day hike.

Where: Southwest of Libby just off Montana Highway 56

When: Spring, summer, and fall

Bonus: Look for American dippers (water ouzels) at Ross Creek, which runs through the area. The entertaining slate-gray birds feed on aquatic insects by walking underwater along the stream bottom.



## 82 See evidence of Glacial Lake Missoula

Fifteen to twenty thousand years ago, vast mile-thick sheets of ice inched down from Canada over what is today northwestern Montana and northern Idaho. A massive ice dam backed up water into northwestern Montana valleys, producing a monstrous lake of long fjord-like inlets known as Glacial Lake Missoula. As water deepened behind the dam, pressure built until eventually the ice formation burst. During the next several days, 500 cubic miles of water was forced between tall cliffs, shooting out of the narrow opening as if sprayed from a nozzle. The cataclysmic flood—estimated at 60 times the flow of the Amazon River—spewed glacial debris and torrential waters more than 400 miles westward all the way to the Pacific Ocean.

Signs of this and similar ice age floods are scattered across northwestern Montana. Evidence includes "strandlines"—horizontal terraces created by varying lake levels most evident on the grassy slopes of mountains around Missoula, particularly Mounts Jumbo and Sentinel. While hard to distinguish during some seasons, they become obvious in fresh or melting snow.

The torrents also loosened boulders and plopped them across what is now the University of Montana campus. One boulder plucked from the walls of Hellgate Canyon, 1 mile east of the university, protrudes 5 feet above the grass in the campus area known as The Oval.

Ice age floodwaters also left ripple marks—huge undulating, wavelike patterns—in the ground. South of Hot Springs, giant grass-covered ripples of silt crest up to 35 feet high. The earthen waves also run perpendicular to Route 382 through Camas Prairie.

Where: Various sites including the University of Montana campus, Mounts Jumbo and Sentinel in Missoula, and areas south of Hot Springs and around Camas Prairie.

When: Year-round. The horizontal terraces along Mounts Jumbo and Sentinel are most obvious after a fresh snow.

Bonus: For more information on the geological cataclysms, including a map of ice age floods, search for "Ice Age Floods" on the *Montana Outdoors* website: fwp.mt.gov/mtoutdoors.

## 83 Cook in a dutch oven

The vessel looks downright medieval, but what it produces is as delicious as food from any modern Cuisinart-outfitted kitchen. The Dutch oven is a lidded, thick-walled cast-iron cooking pot that has been popular for hundreds of years. The name comes from the late 1600s, when the Dutch developed a superior dry-sand process to give their cooking pots a smoother surface. After the vessels were imported to Britain and then the United States, the name stuck.

Lewis and Clark carried one on their epic voyage west, as did most pioneer families in covered wagons and the chuckwagon crews that fed cowboys.

The pot's appeal is its ability to roast and bake a wide variety of slow-cooked foods, including casseroles, stews, biscuits, and even cake. The camping, or outdoor, Dutch oven has three short, stubby legs, a wire handle, and a rimmed lid that can hold coals on top. Coals are also placed under the raised pot, so that food cooks from above and below.

Dutch oven chefs use regular charcoal, lit in a fire-starter chimney and brought to the gray ash stage. The number of coals placed on the lid and below the vessel varies depending on whether you are baking, roasting, or stewing.

One of the best places to learn how to cook in a Dutch oven is at FWP's Becoming an Outdoors-Woman classes (fwp.mt.gov/education/bow), which also teach fly casting, shotgun shooting, canoeing, fire starting, tent setup, dog training, and many other outdoor recreation basics.

Where: Anywhere outdoors

When: Summer is best because it's easier to maintain the right temperatures.

How: In addition to the BOW program, a great online source is dutchovennet.com.

Bonus: Bake a birthday cake at a campsite using a Dutch oven. You can find a gluten-free recipe for Chocolate Amaretto Fudge Brownie Cake at dutchovennet.com.

## 84 Visit a prairie pothole

Northern Montana above the Hi-Line from Fresno Reservoir east is part of what's known as North America's Prairie Pothole Region. Also called "America's duck factory," this portion of the northern Great Plains was created with the retreat of glaciers during the last ice age, about 12,000 years ago. Massive sheets of ice flattened the landscape and left behind hundreds of thousands of ice chunks ranging in size from cabins to football stadiums. When the ice melted, it left behind shallow basins filled with water.

The potholes are rich in plant and animal life, including more than 100 waterfowl, shorebird, and other bird species. The shallow waters warm quickly in the spring sun, providing ducks and other animals with a protein-rich soup of invertebrates. Many potholes are ephemeral (temporary), filling in spring with snowmelt then evaporating in summer to become dry basins. Deeper potholes and those connected to groundwater sources contain water year-round.

The state's prairie pothole abundance makes it one of the nation's top waterfowl producers, a fact well known to Ducks Unlimited members but unknown to most other Montanans.

Where: Major concentrations of prairie potholes are in northern Phillips and Sheridan Counties. The wetlands also dot the Five Valleys area encompassing the Flathead, Blackfoot, Bitterroot, Swan, and Clark Fork river valleys. Several potholes are visible just off Montana Highway 200 at a federal waterfowl production area about 18 miles east of Lincoln.

When: Go in May and June to see breeding waterfowl and other birds. Hunt potholes in October and November.

Bonus: Many people don't know that ducks don't nest in the potholes but rather in grasslands surrounding the basins. When the eggs hatch, the hen takes her brood to the water, where they can swim around safe from land-based predators.

## 85 See the Madison River Canyon Earthquake Area

In August 1959, an earthquake measuring 7.5 on the Richter Scale jarred the West Yellowstone area, causing teacups to rattle as far as 500 miles away in Dickinson, North Dakota. The quake caused a landslide at the west end of Madison Canyon that killed 28 people, many of them campers in the Rock Creek Campground. The 80 million tons of rock blocked the Madison River and formed Quake Lake, today filled with dead trees that stand as grim reminders of the tragic natural disaster.

The area contains an informative visitor center that looks out over the lake and "the mountain that fell." Ask about the "ghost village," a jumble of buildings near the lake's west end that were swept up and dropped here by the floodwaters.

Where: The Earthquake Lake Visitor Center is on U.S. Highway 287 roughly 27 miles northwest of West Yellowstone.

When: The earthquake area can be seen year-round. The visitor center is open mid-May through mid-September.

Bonus: The quake drastically altered geothermal activity in nearby Yellowstone National Park. Roughly 200 geysers in the park erupted during the quake, and new ones sprang to life. Many hot springs changed temperature and volume and even altered color, as minute particles of broken rock muddied the waters.

## 86 Hear a loon call

The loon's haunting sound is the classic "call of the north woods" regularly heard in movies or TV shows set anywhere outdoors that's not downtown Los Angeles or Manhattan. In fact, loons spend their summers only in a few northern states, swimming in clean, cold waters where they nest and feed on fish.

Minnesota and Alaska are the big loon states, each with thousands of birds. The West's largest population is in Montana, where roughly 200 live each summer.

Breeding loons are found primarily in northwestern Montana west of the Continental Divide. The highest concentrations live in the Clearwater drainage east of Missoula, the Tobacco-Stillwater drainage stretching from north of Kalispell to Eureka, and in Glacier National Park. As loons migrate through Montana in spring on their way to those areas and Canadian lakes, look for them at Pablo National Wildlife Refuge, Flathead Lake, Clark Canyon Reservoir, Canyon Ferry Lake, Hauser Lake (between the dam and Black Sandy State Park), and Fort Peck Lake.

Loons make eerie, beautiful calls. Among these are the tremolo, a wavering sound given when a loon is alarmed or to announce its presence at a lake. Another is the wail, the haunting wolflike howl that loons make back and forth to determine each other's location.

Where: Lakes in northern Montana, especially from Eureka south to Salmon Lake, as well as in several large reservoirs statewide during spring migration

When: Summer on lakes and spring on large reservoirs

Bonus: If you are in a boat in summer and a loon approaches while making its haunting call, move away. The song is a warning cry, made because the bird fears your boat will injure its chicks.

## 87 Fish the salmonfly hatch

There are two reasons the salmonfly hatch is such a big deal: (1) Big trout that ordinarily scoff at dinky mayflies will rise to the surface for these massive insects, and (2) even people with no casting skill can fling a Sofa Pillow or other salmonfly imitation the 20 feet or so it takes to reach rising fish that have become temporarily stupid in their desire to eat. The phrase "easy fishing for big trout taking surface flies" is not one you'll hear on Montana rivers except during this particular hatch.

That said, fishing the salmonfly hatch is not as simple as it might sound. These 3-inch-long members of the stonefly family usually emerge during or after runoff when water temperature reaches about 55 degrees. That can vary from year to year by several weeks, and rivers can be high and murky, making it hard to fish even if salmonflies are on the water. In addition, trout fill up quickly on these huge insects and stop eating. When thousands of salmonflies are littering the water and plopping down onto your hat and fishing vest like winged voles, not a single trout may be rising. If the salmonfly hatch is indeed the greatest hatch in Montana, it can also be the most frustrating.

Where: Large, well-oxygenated rivers containing swift, bouldery or riffly stretches and narrow canyon reaches, such as in the Big Hole, Madison, Gallatin, Yellowstone, Clark Fork, and Smith Rivers, as well as Rock Creek.

When: The hatch runs from mid-May to early July, depending on the river and stretch. Generally it starts downstream and moves up several miles each day, based on daylight length and water temperature. The best time to fish the hatch is five to seven days after the peak has passed. By this time trout have had time to digest their feast on naturals and are getting hungry again.

How: Cast near shore, where adult salmonflies fall from bushes, tree branches, and other streamside vegetation. Target water a few yards downstream or downwind of overhanging branches. As for flies, use whatever adult imitations fly shops recommend. Tippets should be short and heavy—3X or 2X—because the trout aren't skittish and you'll need to yank a few flies that end up getting cast into trees and shrubs.

Bonus: If you find a stretch with salmonflies hatching but without rising fish, head upstream a few miles and fish a big stonefly nymph below the surface. Because the hatch hasn't arrived yet, the trout will be keyed in on the nymphal stage.

## 88 Float the South Fork of the Flathead

The two great river floats in Montana are the Smith and this one in the heart of the Bob Marshall Wilderness.

The South Fork of the Flathead flows through some of the wildest country in the Lower 48. No roads, no settlements, no cabins. What you will see are lots of anglers. The South Fork's phenomenal westslope cutthroat fishing, with catches of 30 to 50 or more 12- to 17-inch trout per day, has not gone unnoticed by outfitters. Expect to see a dozen or more rafts float by each day in midsummer.

The challenge of floating this federally designated Wild and Scenic River is reaching the best fishing water, far upstream. Most people get there via the shoreline trail from Hungry Horse. They use pack horses that carry inflatable rafts and other gear, or they haul in small inflatables themsleves. The river's best fishing—catch and release for cutthroat—starts at Big Prairie. Some backpackers reach this water by climbing over the Swan Range from Holland Lake to the southwest or over Youngs Pass from Dunham Creek Trailhead. If you are up to it, either route is a fine way to reach the upper South Fork of the Flathead, fish a few days, then backpack out the way you came.

Where: The float begins in the heart of the Bob Marshall Wilderness and ends up 50 river miles downstream near the head of Hungry Horse Reservoir.

When: July and August

How: The best and most up-to-date information on the river is in Ben Romans's *Montana's Best Fly Fishing*, published by Headwater Books. The easiest way to float the river is with an outfitter, who will haul rafts, food, and other gear up to the starting point and then guide you on the way down. Other options include outfitted drop camps and hiking in on your own, with or without a raft. Romans's book has details for do-it-yourselfers.

Bonus: This is one of the few waters in Montana where you can legally fish for bull trout. These massive char run 20 to 36 inches and must be released immediately. Fishing for them requires a catch card available from FWP. Check the annual fishing regulations for season dates.

## 89 Collect a moss (Yellowstone) agate

Montana has two state gemstones: the sapphire and the moss, or Yellowstone, agate. The sapphire is mined in the state's western and central mountains; the moss agate, considered by rock hounds to be among the world's finest, is found along gravel bars of the Yellowstone River from the mouth of the Bighorn River downstream to Sidney.

Agates are formed by bubbles made from gasses within cooling igneous (volcanic) rock. The bubbles form plume-like cavities that fill with silica tinted by iron and other minerals. As the silica hardens, it forms colorful organic shapes in the translucent stone. Also known as picture agates, moss agates can be cut and polished to exhibit shapes and colors that resemble trees, sunsets, and rivers.

On the outside, the agates look much like any other rock. Before searching, examine photographs online so you'll know what to look for.

Where: Sandbars along the Yellowstone River from the Bighorn River confluence to Sidney. The river and banks are public lands. Gain access from bridge crossings and fishing access sites, or by asking private landowners.

When: Midsummer just after runoff has scoured gravel beds and exposed new agates

Bonus: Have your agates tumbled and polished at local rock shops found in many towns along the river. Many shops also sell polished moss agates and agate jewelry.

## 90 See wild bison at the National Bison Range Wildlife Refuge

The world's top spot to see bison is Yellowstone National Park. Unfortunately, very little of the park is in Montana. So if you want to see bison in the Treasure State, your best bet is the National Bison Range Wildlife Refuge north of Missoula. Technically the animals are not free ranging; the 18,500-acre preserve is ringed by a tall, sturdy fence. But the sight of several dozen bison wandering across the sagebrush hills is about as close as you can come to envisioning what a wildlife-filled Montana prairie looked like 150 years ago.

The National Bison Range, located near Moiese, was established in 1908 when the government bought land from the Confederated Salish and Kootenai Tribes. Using private donations, the newly formed American Bison Society stocked the range with 34 bison purchased from a local ranching family. Today the range is home to 350 to 500 bison, as well as 50 other mammal species and 200 species of birds.

Start your trip at the visitor center, which contains informative displays and handouts, restrooms, videos, a bookstore, and staff to answer questions and collect the refuge's entrance fee.

Where: Roughly 35 miles north of Missoula off U.S. Highway 93

When: Spring, summer, and fall are best.

Bonus 1: The federal area is also loaded with other wildlife. In addition to bison, look for pronghorn, elk, mule deer, black bears, and bird species including waterfowl, shorebirds, golden eagles, and other raptors.

Bonus 2: Also visit nearby Pablo and Ninepipe National Wildlife Refuges, both packed with waterfowl, shorebirds, and other wildlife.

## 91 Fish the Blackfeet Indian Reservation lakes for monster rainbows

Trout as big and fat as footballs, some weighing 10 pounds or more, swim in natural lakes and small reservoirs on the Blackfeet Indian Reservation, along the eastern border of Glacier National Park. The rainbows grow massive by eating native freshwater shrimp, which thrive in the calcium-rich waters. The fish generally hang out at the bottom, requiring a float tube and, for fly anglers, sinking line. Fly-fishing artistry this is not, especially when the region's legendary winds are howling, which is most of the time. But the payoff can be rainbows over 2 feet long that weigh more than a steelhead.

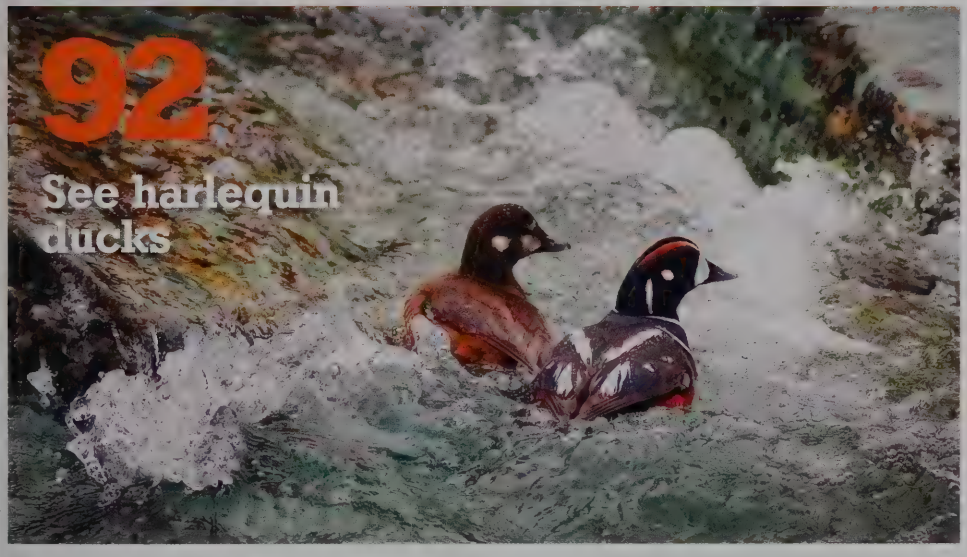
**Where:** The reservation is east of the Rocky Mountain Front bordered by Canada and Glacier National Park.

**When:** From ice-out in late March through late September. The best nymphing is right after ice-out, and the best dry-fly action is in mid-June, when trout take damselflies near shore.

**How:** Some of the best information available on fishing reservation rainbows is in a 2008 article by Montana fishing guru Greg Thomas that ran in *Fly Fisherman*.

**Cost:** Buy a reservation permit—daily ($15) or season ($50)—at local shops in Browning. You don't need a Montana fishing license on the reservation.

**Bonus:** The wind here blows constantly, tearing road signs off posts and dropping temperatures 10 to 20 degrees below what it feels like in shelter. Dress warmly, then add a layer or two on top of that.



## 92 See harlequin ducks

Trout anglers fishing high-mountain streams are occasionally surprised when a pair of odd-looking ducks flush from the swift current. These are harlequins, waterfowl that spend much of the year along the ocean but travel inland to breed. The ones found in Montana come from the Pacific Coast and nest along high-altitude creeks in the state's northwestern region.

The duck is named for the classical European theatrical clown who wore a multicolored costume and face paint. The male is colored, the female a drab brown. Both sexes have a white spot on either side of the head. The species is also known on the coasts as surfer duck, and inland as mountain duck and glacier duck. Its high-pitched call has spawned the monikers squeaker, squealer, and sea mouse. Harlequin drakes and hens are known as lords and ladies.

In spring, mating pairs head inland for the seclusion of wild, remote, swift-flowing streams. Glacier National Park is home to one of the densest populations in the lower 48 states, and contains the best (but not only) harlequin viewing opportunities. Because these shy sea ducks may abandon a nesting area if disturbed, watch quietly from behind trees or shrubs.

**Where:** Spot harlequin ducks on Upper McDonald Creek in Glacier National Park along Going-to-the-Sun Road. Also search along streams on the Rocky Mountain Front, tributaries of the Lower Clark Fork River, and tributaries of the North, South, and Middle Forks of the Flathead River.

**When:** May and June. Note that at this time of year Going-to-the-Sun Road will still be closed to vehicles. But the road is open to bicycles then, and you can cycle up to Upper McDonald Creek and look for the ducks.

**Bonus:** The male's white markings make him stand out along a mountain stream, but the bright spots provide superb camouflage when the duck is riding whitecapped waves in the ocean.

## 93 See wild mustangs

Many people love the notion of wild horses—free-spirited stallions and mares racing across the prairie, tails and manes blowing in the wind.

Not everyone is so enamored. Many ranchers consider wild horses feral livestock that eat grass meant for cattle. Wildlife professionals are of roughly the same mind, concerned that wild horses compete for grass with bighorn sheep and other native big game animals.

Wild horses at two sites in Montana are descendants of tame animals that escaped or were abandoned a century ago or longer. The horses, also known as mustangs, are wild in the sense that they are not branded or privately owned. But they are not wildlife.

The Pryor Mountain mustangs are stock from horses brought to the New World by Spanish explorers 500 years ago. The horses show traces of their Iberian lineage. They are small with a narrow, deep chest; some are marked with zebra stripes on the legs and with a black stripe running down their short, strong back.

Horses first appeared on Wild Horse Island, now a state park in Flathead Lake, about 300 years ago. Apparently Kootenai Indians tried to hide their horses from rival Blackfeet by swimming them from island to island. The horses established a wild population at one island, but were removed after settlers homesteaded there in the early 1900s. In the 1980s, FWP decided to officially restore wild horses to the site and adopted several from a feral herd in Oregon. The island herd is kept small to protect native grasses and other vegetation from overgrazing.

**Where:** The Pryor Mountain Wild Horse Range is south of Billings near the Wyoming border. Wild Horse Island is a state park in the southwestern portion of Flathead Lake, accessible only by boat.

**When:** Summer and fall are the best seasons to see horses at both sites. Summer in the Pryors can be brutally hot, so bring water and a wide-brimmed hat for shade.

**Bonus:** At the Pryors, look for the telltale zebra striping on the horses' legs or black stripe on the back that indicates their Spanish ancestry. On Wild Horse Island, keep an eye out for bighorn sheep, massive mule deer bucks, and other wildlife native to the region.

## 94 Drive the Beartooth All-American Road

Like Going-to-the-Sun Road in Glacier National Park, this famous scenic drive allows you to take in breathtaking views and scenic panoramas while still in your pajamas (if you drive that way). The Beartooth All-American Road, also called the Beartooth Highway, is surrounded by the Custer, Gallatin, and Shoshone National Forests, parallels the Absaroka-Beartooth Wilderness, and abuts Yellowstone National Park. Beauty and wildness abound. The route starts in Montana either in Red Lodge or Silver Gate, with much of the road (and the most scenic parts) in Wyoming. The highway is known for hairpin turns and switchbacks as you move up in elevation from Douglas fir and lodgepole pine to Engelmann spruce, then subalpine fir, and finally treeless alpine wildflower meadows covered in granite boulders and dotted with lakes. The highway has numerous pullouts where you can stop to gawk or park and hike.

Hiking is definitely encouraged. Wildflowers are abundant in midsummer, and mountain goats, moose, elk, marmots, mule deer, black bears, grizzly bears, and wolves may be spotted any season. If you leave your vehicle, bring a raincoat and warm clothes. Snow and storms can blow in any time of year. Carry bug spray in summer.

Where: Start at Red Lodge, 40 miles southwest of Billings on U.S. Highway 212, or at Silver Gate, reached by driving into Yellowstone's northwestern entrance at Gardiner then continuing east through the park.

When: The highway is closed in winter. Depending on snow conditions, it usually opens Memorial Day weekend and closes in late September. Also, time your drive to reduce glare by traveling west to east in the evening or east to west in the morning.

Bonus: If you're lucky, you might make the trip on an unannounced date each July when the Red Lodge Chamber of Commerce serves free pop along the side of the road at the summit, locally known as the "Top of the World."

## 96 Visit the badlands and rock formations of Makoshika and Medicine Rocks State Parks

## 95 Spot a grizzly

For many people, seeing a grizzly is the thrill of a lifetime. This beautiful creature is a symbol of wilderness, strength, and courage. It's also highly unpredictable and potentially dangerous.

Though attacks by grizzlies are rare, they do happen. If you go out hoping to see one, be extremely cautious. Carry bear pepper spray and make noise so you don't surprise an unwary bear (yes, that reduces chances of sightings but also of dangerous incidents). If you spot a grizzly, maintain a safe distance and do not approach the animal.

Where: Grizzlies live throughout western and central Montana in forested areas. Densest concentrations are in and around Yellowstone and Glacier National Parks, as well as in the Bob Marshall Wilderness.

When: Most sightings occur in late summer when the bears move around trying to find food to fatten up for hibernation.

Note: For more on safety around grizzly bears, visit the *Montana Outdoors* website (fwp.mt.gov/mtoutdoors) and search for "Bear Safety."

Bonus: Learn to differentiate a grizzly bear from a black bear by taking FWP's bear identification training and test at the agency's website: fwp.mt.gov.

CLOCKWISE FROM TOP LEFT: COLLEEN KILBANE;

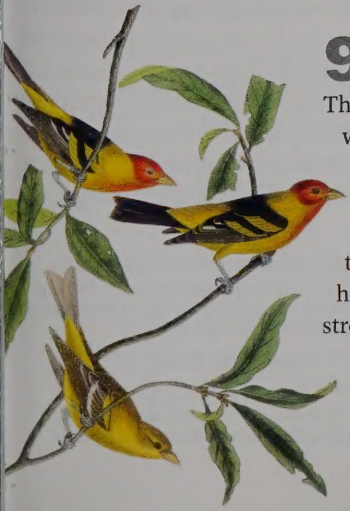
Just outside Glendive, **Makoshika State Park** is a geologic wonderland filled with deep ravines and box canyons. Its 11,000-plus acres of heavily eroded badlands were formed by a geologic buckling that raised what were once sea beds hundreds of feet above the prairie. Eons of wind, rain, and snow runoff cut through layers of the Fort Union Formation to expose the even older Hell Creek Formation, in which entire dinosaur skeletons have been found.

**Medicine Rocks State Park**, 55 miles to the south, is named for huge sandstone formations carved by wind and rain into shapes and holes. Often resembling chunks of Swiss cheese, the stone is all that remains of sandbars created millions of years ago in an ancient river. The Lakota Indian name for the unusual stone formations is *Inyan-oka-la-ka*, or "Rock with a Hole in It." Indians also called the area Medicine Rocks and used it for vision quests, as shelter from storms, and as lookout posts for spotting enemies and bison. It's said that Sitting Bull and his warriors camped here before the Battle of the Little Bighorn, waiting for guidance from their medicine men.

Where: Makoshika State Park is 4 miles southeast of Glendive. Signs are abundant. Medicine Rocks State Park is 11 miles north of Ekalaka on Montana Highway 7.

When: Each season has its own beauty, but spring and fall are the most comfortable for hiking. Summer can be brutally hot with relentless sunshine and little shade.

Bonus: Though fossil collecting is discouraged, keep an eye out for dinosaur bones in Makoshika. At Medicine Rocks, look for old tipi rings.



## 97 See a western tanager

These small songbirds are so vibrantly colored they seem to belong in the jungles of Central America. In fact, many winter in Nicaragua and Costa Rica. Each spring these and other tanagers make their way to breeding grounds in Montana, western Canada, and Alaska. They nest in open coniferous and mixed deciduous-coniferous forests containing lodgepole pine, Douglas fir, and ponderosa pine. During summer western tanagers can be found in these habitats across western and central Montana; during spring and fall migrations they show up throughout the state. Males are the most colorful and, during breeding season, the easiest to recognize: red-orange face and head; yellow body; black back, wings, and tail; and yellowish-white wing bars. Anglers regularly see western tanagers streamside, flitting from tree to tree in search of spruce budworms, beetles, and caterpillars.

Where: Open forests containing Douglas fir, lodgepole, and ponderosa pine throughout western and central Montana.

When: May through September. Peak spring migration is during the last week in May and first week in June.

Bonus: The western tanager breeds farther north than any other "neotropical" warbler (those that winter in Central or South America). Some western tanagers migrate as far as the Yukon, Northwest Territories, and southeastern Alaska, adding bright bursts of color to those northern climes.

# 98 See bitterroot in bloom

Spotting Montana's state flower should be easy. It's bright pink, with large concentrations on open hillsides sometimes visible from a quarter mile away. Yet the bitterroot, a member of the lily family confined to a limited range in west-central Montana, is often elusive even when flowering.

A small, low-growing plant, the bitterroot exists on dry rocky, gravelly, or sandy soil in sparsely vegetated hillsides often dotted with ponderosa pine. It first appears in spring as green rosettes of fleshy 1- to 2-inch leaves spread out from a central stem. When the plant blooms, from mid-May to early June, the pink petals obscure the succulent leaves, which quickly shrivel and disappear.

Because the plant blooms only under direct sunlight, petals remain folded in morning and evening. The best time to see the blooms is midday, when seemingly from nowhere dozens or even hundreds of pink flowers show themselves.

Meriwether Lewis, who first officially described the plant in 1805, gave it its scientific name, *Lewisia rediviva*. *Rediviva* is Latin for "revived," referring to the plant's ability to survive even when dug up and transported long distances.

The plant's common name refers to the bitter taste of the root, which for centuries was boiled and eaten by American Indians, along with Cous biscuitroot and blue camas.

**Where:** Around Helena, Missoula, and Dillon, and in the Bitterroot Valley

**When:** Bitterroot blooms from May to early June.

**Bonus:** The Montana Legislature designated the bitterroot as the state flower in 1895. Second and third place? The evening primrose and wild rose, respectively.

# 99 Visit Red Rock Lakes NWR

Tucked into the southwestern corner of the state, in a remote valley ringed with high, rounded peaks, this scenic national wildlife refuge is rarely visited by Montanans or tourists. That leaves it all the more enjoyable for those in the know.

Red Rock Lakes is a remote series of high-altitude wetlands and lakes that first gained exposure in 1933 when biologists discovered a small flock of 66 trumpeter swans, thought to be extinct in the United States. The discovery spurred the federal government to establish, two years later, the nearly 50,000-acre national wildlife refuge, one of the nation's first. Today the refuge is home to several hundred swans in summer and up to 2,000 in winter, when they congregate on lakes kept ice free by geothermal springs.

That's not all. Rare combinations of habitat allow visitors to see prairie species like pronghorn and sage-grouse close to wetland forest wildlife such as moose and otters. The widely varied habitat also attracts elk, mule deer, white-tailed deer, sandhill cranes, waterfowl, and another 150 or so other bird and mammal species.

Because much of the refuge is designated as a national wilderness area, it contains no developed wildlife viewing areas or designated hiking paths. Visitors explore the refuge by following game trails or striking out cross-country.

**Where:** From I-15 at Monida Pass, take County Road 509 east for about 20 miles to the refuge entrance. The refuge is also accessible in summer from West Yellowstone via a county road that goes over Red Rock Pass.

**When:** The refuge is open year-round.

**Bonus:** Just east of the refuge's eastern border, near 10,203-foot Mount Jefferson, is the true source of the Missouri River. A spring bubbling up from granite boulders becomes Hellroaring Creek, which feeds into Red Rock Creek, which flows into the refuge and widens to become the Red Rock River. At Clark Canyon Dam, the river turns into the Beaverhead, then, at Twin Bridges, the Jefferson, and finally, joining with the Gallatin and Madison at Three Forks, the Missouri.

# 100 Soak in a hot spring

Coming from deep within the earth, hot springs are high-temperature water sources known for soothing sore backs and rejuvenating tired souls. In Montana, geothermal groundwater bubbles up at 61 known hot springs, ranging from remote streams plunging into backcountry rivers to developed pools equipped with waterslides and changing rooms. People enjoy lounging in hot springs because the warm water relaxes muscles, and dissolved minerals such as sulphur and sodium are thought to provide medicinal benefits.

**Where:** The best source for finding a soaking hotspot, either commercial or undeveloped, is at montanahotsprings.net. The website lists the locations of all known hot springs in Montana. One of the most accessible and enjoyable undeveloped hot springs is the Boiling River, located between Mammoth Hot Springs and Gardiner in Yellowstone National Park.

**When:** Anytime, though hot springs are most fun and relaxing in cool weather

**How:** Soak until you begin to wrinkle. Dry off. Repeat.

**Note:** Be sure you aren't trespassing when visiting undeveloped sites. Also, some wild hot springs can be too warm or too cool to enjoy. Ask around to find ones that are comfortable.

Have you seen and done the best of Montana's outdoors? Use this list to keep track of outside activities you've experienced and sights you've seen. Keep it handy this summer as you explore Montana, and check off each new accomplishments. If you or others you know ever achieve all 100, contact us at montanaoutdoors@mt.gov.

- ☐ 1. Visit Sun River WMA
- ☐ 2. See sandhill cranes perform their mating dance
- ☐ 3. Hear an elk bugle
- ☐ 4. Smell a ponderosa pine
- ☐ 5. See a moose
- ☐ 6. Hike to an alpine lake
- ☐ 7. Pick a quart of morel mushrooms
- ☐ 8. View Egg Mountain
- ☐ 9. See a prairie dog town
- ☐ 10. Fly-fish the Blackfoot
- ☐ 11. See western grebes conducting their rushing ceremony
- ☐ 12. Hunt a Block Management Area
- ☐ 13. Observe mountain goats
- ☐ 14. Fish with a guide
- ☐ 15. Watch mule deer "stot"
- ☐ 16. See the northern lights
- ☐ 17. See a running pronghorn herd
- ☐ 18. Walk along the Old North Trail
- ☐ 19. Visit the Varney Bridge section of the Madison River
- ☐ 20. Learn to cast a fly rod
- ☐ 21. Learn to read a topo map
- ☐ 22. Visit a pishkun (buffalo jump)
- ☐ 23. Hike while carrying bear pepper spray
- ☐ 24. See the Chinese Wall
- ☐ 25. Drive around Flathead Lake
- ☐ 26. Visit a hunter check station in November
- ☐ 27. Get stuck in gumbo
- ☐ 28. See a burrowing owl
- ☐ 29. Visit Bighorn Canyon
- ☐ 30. Backpack the famous Beartooth Traverse
- ☐ 31. Catch a walleye
- ☐ 32. See the world's largest western larch
- ☐ 33. Fish all of Montana's blue-ribbon rivers
- ☐ 34. See a swift fox
- ☐ 35. Float the Smith
- ☐ 36. See beargrass in bloom
- ☐ 37. Look for shed antlers
- ☐ 38. Go ice fishing
- ☐ 39. Admire William Clark's signature at Pompeys Pillar
- ☐ 40. Ask permission to hunt private land
- ☐ 41. Call in a tom turkey
- ☐ 42. Hike to Grinnell Glacier
- ☐ 43. See the fall golden eagle migration at Rogers Pass or Bridger Mountain Ridge
- ☐ 44. Go on an outfitted backcountry trip
- ☐ 45. Spot a white-tailed ptarmigan
- ☐ 46. Hear a wolf howl
- ☐ 47. See Kootenai Falls
- ☐ 48. Catch an arctic grayling in the Big Hole River
- ☐ 49. See the Giant Springs
- ☐ 50. Visit an ancient tipi ring
- ☐ 51. Hike up Square Butte
- ☐ 52. Spot a mountain lion track
- ☐ 53. Fish Nelson Reservoir
- ☐ 54. See the snow geese at Freezeout Lake
- ☐ 55. Visit Fort Peck Dam
- ☐ 56. Pick a quart of huckleberries
- ☐ 57. Learn to row a drift boat
- ☐ 58. Snag a paddlefish
- ☐ 59. "Play" the Ringing Rocks
- ☐ 60. Bike the Hiawatha Trail
- ☐ 61. Hunt upland birds over a pointing dog
- ☐ 62. See a long-billed curlew
- ☐ 63. Take the Going-to-the-Sun Road drive
- ☐ 64. Float the Missouri River White Cliffs Area
- ☐ 65. Fish the Mother's Day caddis hatch
- ☐ 66. See wild sheep at Koo-Koo-Sint Viewing Site
- ☐ 67. Catch a Columbia River interior redband trout
- ☐ 68. Go elk hunting
- ☐ 69. See sage-grouse and sharp-tailed grouse on their spring mating grounds
- ☐ 70. Join the annual Audubon Christmas Bird Count
- ☐ 71. See quaking aspen in fall
- ☐ 72. Tie a fly
- ☐ 73. Walk under the Roosevelt Arch at Yellowstone National Park
- ☐ 74. See (and hear) a prairie rattlesnake
- ☐ 75. Hike a prairie in June
- ☐ 76. Catch a westslope cutthroat trout
- ☐ 77. Explore Lewis and Clark Caverns
- ☐ 78. Fish a lazy warmwater river
- ☐ 79. Take the CMR National Wildlife Refuge auto tour
- ☐ 80. See a greater short-horned lizard
- ☐ 81. Visit the Ross Creek cedars
- ☐ 82. See evidence of Glacial Lake Missoula
- ☐ 83. Cook in a dutch oven
- ☐ 84. Visit a prairie pothole
- ☐ 85. See the Madison River Canyon Earthquake Area
- ☐ 86. Hear a loon call
- ☐ 87. Fish the salmonfly hatch
- ☐ 88. Float the South Fork of the Flathead
- ☐ 89. Collect a moss (Yellowstone) agate
- ☐ 90. See wild bison at the National Bison Range Wildlife Refuge
- ☐ 91. Fish the Blackfeet Indian Reservation lakes for monster rainbows
- ☐ 92. See harlequin ducks
- ☐ 93. See wild mustangs
- ☐ 94. Drive the Beartooth All-American Road
- ☐ 95. Spot a grizzly
- ☐ 96. Visit the badlands and rock formations of Makoshika and Medicine Rocks State Parks
- ☐ 97. See a western tanager
- ☐ 98. See bitterroot in bloom
- ☐ 99. Visit Red Rock Lakes NWR
- ☐ 100. Soak in a hot spring

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## PARTING SHOT

**99 TO GO** Floating the White Cliffs Area of the Missouri River is just one of 100 must-do activities or must-see sights we recommend in this special issue of *Montana Outdoors*. Learn what else you might want to see and do this summer starting on page 2. Photo by Donnie Sexton/Montana Office of Tourism.

Montana Fish, Wildlife & Parks

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